Public Utilities

FORTNIGHTLY

May 25, 1944

NEW JERSEY ADJUSTMENT PLAN
Statement by Joseph E. Conlon

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Structure and Mechanics of the New Jersey Adjustment Plan
By J. Rhoads Foster and Malcolm G. Davis

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Rationale of the New Jersey Adjustment Plan
By J. Rhoads Foster

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Regulation by Formula—New Jersey Adjustment Plan
By Malcolm G. Davis

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Public Utilities Fortnightly

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Pages with the Editors

RECENTLY we dropped into a hearing before the District of Columbia Public Utilities Commission involving the so-called Washington plan for regulating electric rates on a sliding-scale, profit-sharing basis. This plan, which has resulted in an electric rate reduction for the citizens of Washington practically every year since it was introduced in 1926, and has brought the comparable domestic rate in the nation's capital to one of the lowest in the entire country, has generally been regarded as successful on that account.

APPARENTLY there is at least one school of thought, however, which regards any evidence of profitable operation by a private corporation as *ipso facto* a failure. Regulation, according to this view, is not successful unless it keeps the private utility dangling on the ragged edge of solvency, ready to fall under pressure of economic dislocation plum-ripe into the horny hand of the sheriff—or perhaps government ownership by default. Maybe that is the real idea and ultimate objective of the advocates of this school of thought.

AT any rate, we were rather surprised to hear the counsel for the Federal Works Agency call the Washington plan a "device" manufactured as the result of a "conspiracy" between certain utility officials and presumably regulatory officials, some of whom now sleep in honored graves, while others wear the uniform of their country. The object of this dastardly plot, uncovered after all these years, was to yield greater profits to the utility company. The fact that it yielded lower rates to the utility's consumers by the same process of profit sharing was relatively unimportant.

JOSEPH E. CONLON

New Jersey is willing to try a promising experiment in regulation.

(SEE PAGE 663)

J. RHOADS FOSTER

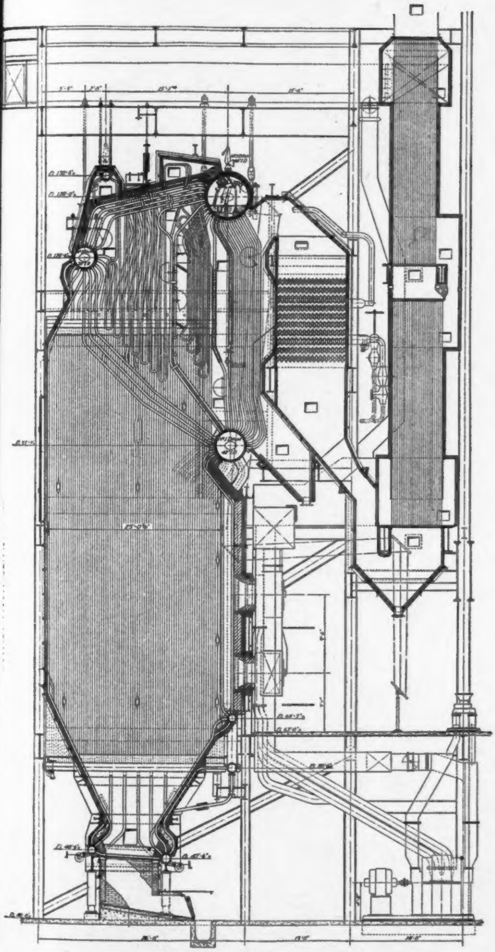
The New Jersey plan is no arbitrary rule of thumb; it has a philosophy behind it.

(SEE PAGE 673)

IN other words, the failure of the Washington plan seems to be that it gives a utility some reasonable expectation of security that it can keep a small part of any extra profits its managerial efficiency might accomplish, provided the greater part is plowed back into the customer's pockets by way of rate reductions. Thus, the real "failure" of the Washington plan seems to be the profit motive—that is, in the eyes of people who don't like the profit motive anyhow.

WE know of a number of cities, however, not all of them served by private utilities, which would welcome such a "conspiracy" if it would bring rates corresponding to those

another Riley Central Station Installation exceeds guaranteed Performance



Actual efficiency of Riley Units at Venice Station exceeds guaranteed efficiency by 2.1 points.

Actual Results

Lbs. of steam per hr.	373,870
Heat Losses	
Moisture in Fuel	1.0
Hydrogen	3.8
Moisture in Air	.1
Dry Chimney Gas	4.2
Combustible	.7
Radiation & Unaccounted for	1.7
Actual Efficiency	88.5%
Guaranteed Efficiency	86.4%

Union Electric Co. of Ill.
Venice Station, Ill.
370,000 lbs. of steam per hour
1000 lbs. Pressure
915°F. Steam Temperature
Units fired by Riley Pulverizers
Stone & Webster Engineering Corporation, Engineers

RILEY
STOKER CORPORATION, WORCESTER, MASS.

COMPLETE STEAM GENERATING UNITS

BOILERS-PULVERIZERS-BURNERS-STOKERS-SUPERHEATERS
AIR HEATERS - ECONOMIZERS - WATER-COOLED FURNACES
STEEL-CLAD INSULATED SETTINGS - FLUE GAS SCRUBBERS

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prevailing in the nation's capital. We know a number of private utilities which would likewise welcome such a benevolent conspiracy that would yield corresponding prosperity and freedom from regulatory upheavals. But all this, in the book of the supercritic of regulation, would merely add up to more evidence that "nothing fails like success."

EVEN its best friends will probably admit that the Washington plan has its flaws and has to be checked and overhauled every so often. For this reason we take pleasure in devoting the best part of this issue to a description and discussion of a streamlined model of the Washington plan—one which has so many original features that it is fully entitled to a good name of its own. We don't know what its various parents call it for short. But we call it the "New Jersey adjustment plan," and this is our "New Jersey adjustment plan" issue.

INTRODUCING this discussion is a statement by the president of the New Jersey Board of Public Utility Commissioners, which has launched this interesting regulatory experiment in its recent order approving the application of the plan to the New Jersey Power & Light Company, text of which is to be found in the *Public Utilities Reports* preprint section of this issue, 53 PUR(NS) 1. PRESIDENT JOSEPH E. CONLON, himself a previous contributor to this magazine, was first appointed to the New Jersey board by Governor Edison on June 25, 1941. Aside from his duties as the chief of that agency, he has been very active with emergency control work in connection with New Jersey utility operations. Before entering the field of public utility regulation, MR. CONLON served as first assistant prosecutor of Essex county from 1933 to 1941.

DR. J. RHOADS FOSTER, author of the article entitled "Rationale of the New Jersey Adjustment Plan" (beginning page 673), and co-author of the article which explains the mechanics of the New Jersey adjustment plan, which begins on page 666, is the staff member of the New Jersey board who took the leading part in formulating the principles and working out the details of the plan. Born in Missouri in 1906, DR. FOSTER attended Columbia University and New York University and graduated with a PhD from his native University of Missouri in 1933. In that year he became an assistant rate engineer for Consolidated Edison Company of New York city, and in 1937 joined the New Jersey Board of Public Utility Commissioners as economic adviser.

DURING most of this period he has also lectured on and taught various phases of public utility regulation in New York University.

MALCOLM G. DAVIS, author of the article entitled "Regulation by Formula—New Jersey Adjustment Plan" (which begins page 681), is more or less the counterpart of Dr. Foster in working out the application of the New Jersey adjustment plan for its first customer—the New Jersey Power & Light Company.

MALCOLM G. DAVIS

The New Jersey plan is a challenge to the theory of quasi automatic regulation.

(SEE PAGE 681)

IN other words, MR. DAVIS acted for the company while Dr. Foster acted for the board, and apparently both got on very well together or they could never have written the joint article which appears in this issue on page 666.

MR. DAVIS, who is already known to FORTNIGHTLY readers for his previous writings in these pages, was born and bred in Washington, D. C., graduating from the Massachusetts Institute of Technology, class of '25. After serving as junior engineer with the Southern Sierras Power Company and as staff engineer with the California Railroad Commission, MR. DAVIS served as the director of rates and statistics with the Duquesne Light Company from 1929 to 1940, and as consultant on various problems of public utility economics between 1935 and 1940. In 1941 he became affiliated with the Associated Gas & Electric system as adviser on rate and research matters and in the following year took his present post as vice president in charge of the research division of Gilbert Associates, Inc., engineers and consultants of New York city, retained by the New Jersey utility.

THE next number of this magazine will be out June 8th.

The Editors

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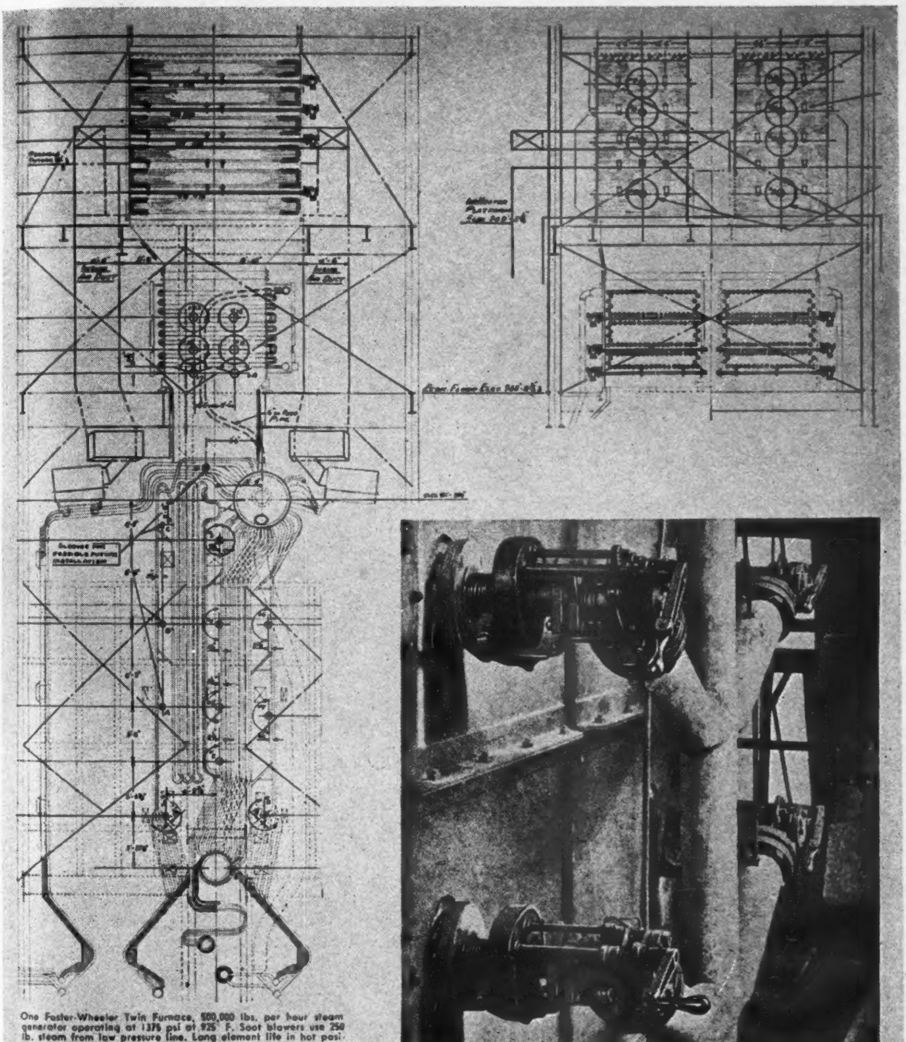
In This Issue

PREPRINTS FROM PUBLIC UTILITIES REPORTS

Various regulatory rulings by courts and commissions reported in full text, pages 1—64, from 53 PUR(NS)

VULCAN ENGINEERED SOOT BLOWER INSTALLATIONS



One Foster-Wheeler Twin Furnace, 500,000 lbs. per hour steam generator operating at 1375 psi at 925° F. Soot blowers use 250 lb. steam from low pressure line. Long element life in hot positions is obtained by use of HyVULoy elements and protective bearings. Proper cleaning assured by use of LG-2 automatic valved heads with slow-speed attachments. The over-arm support (page 6) even with the large relative movements gives easy operation and eliminates element warpage.

View of economizer installation with LG2 crank operated head. Note the folding cranks and ease of piping up.

The new VULCAN catalog fully describing VULCAN equipment appears in the 1944 Sweets, and a copy is available on your request.

VULCAN SOOT BLOWER CORPORATION, DU BOIS, PENNA.

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Remarkable Remarks

"There never was in the world two opinions alike."
—MONTAIGNE

FRED KLEINMAN
Rate expert, Illinois Commerce Commission.

"Based on a study I have made, I have reached a judgment figure indicating that public utilities securities will sell for twenty-one times their earnings."

C. H. LEATHAM
Monongahela West Penn Public Service Company.

"Successful farm electrification programs must have the farmer's interest at heart. Let's not sell electric service to the farmer in jobs it's not suited to."

JOHN F. FENNELLY
Executive director, Committee for Economic Development.

"Mere reconversion to 1940 business levels would result in 15,000,000 to 19,000,000 of unemployed instead of the 9,000,000 in 1940. Speed is all essential in getting the industrial machine into high gear as soon as possible after the war."

ALEXANDER WILEY
U. S. Senator from Wisconsin.

"If in our land we cannot eliminate and arrest the mounting tide of juvenile delinquency, how can we conceivably expect on an international scale to obliterate the scars of a relentless and ruthless war from the hearts and minds of millions of European children?"

GEORGE D. AIKEN
U. S. Senator from Vermont.

"If we regulate ourselves through our own organizations, then we will be in a better position to protest against the harassing and multitudinous regulations of the Federal government. If we do not regulate ourselves, then we may expect that government will do it for us even though it does it badly."

HAROLD L. ICKES
Secretary of the Interior.

"If these [war] plants are merely turned over to be quietly throttled in the interest of an economy of scarcity —scarce production, scarce opportunity, and few jobs— we can confidently look forward to postwar chaos. On the other hand, continued government ownership and operation would be a negative answer."

THOMAS E. DEWEY
Governor of New York.

"If the peace we build is to succeed, it must reflect the will and understanding of our people. That understanding can be fostered and that will expressed through a free press. Certainly in the years to come, the peace will succeed only if our people have the information and the will to make it succeed as a living reality. For the sake of our sons and our sons' sons, we must have the determined, abiding will to build a better world."

Billion-Dollar Payday

Uncle Sam's billion-dollar payday calls for global strategy. For over ten million men must be paid . . . *on the spot,* which might be Alaska or Australia, Iceland or India, South America or China . . . *in cash they can spend,* which means dollars and dinari, pounds and pesos, rupees and rubles.

Each man's pay is a complicated calculation that considers rank . . . allowance for subsistence . . . allotments for dependents . . . extra pay for specialist's ratings, overseas service, distinguished service awards and qualification in the use of arms . . . deductions for insurance premiums, War Bonds and special items.

Plainly, Uncle Sam's billion-dollar payday involves one of the greatest figuring and record-keeping jobs of all time, impossible to perform without accounting machines. In the armed services and in government offices, thousands of fast, accurate Burroughs adding, calculating and accounting machines are playing an outstanding part in this war work so vital to our fighters and to their families at home.

BURROUGHS ADDING MACHINE CO. • DETROIT 32, MICHIGAN

ARMY E NAVY

Norden Bombsights

Years of experience in precision manufacturing are enabling Burroughs to produce and deliver the famous Norden bombsight—one of the most precise instruments used in modern warfare.

New figuring and accounting machines are also being produced by Burroughs for the Army, Navy, U. S. Government and other enterprises whose needs are approved by the War Production Board.

Burroughs

FIGURING, ACCOUNTING AND STATISTICAL MACHINES • NATIONWIDE MAINTENANCE SERVICE • BUSINESS MACHINE SUPPLIES

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FRANK E. GANNETT
Newspaper publisher.

"Our whole theory of taxation must be revised. Instead of punishing men for making money and developing business, we should reward them by a system of incentive taxation."

WILLIAM WHITE
President, Delaware, Lackawanna & Western Railroad.

"Many railroads have earned enough net income during the war years to have paid larger dividends, but wisely they have restricted dividends and used earnings to reduce indebtedness, and retained funds for future use, with the hope that in the long run these policies will redound to the advantage of the public, labor, and capital."

CORDELL HULL
Secretary of State.

"We citizens of this hemisphere have great opportunities before us. The community of action among the American nations, already highly developed, will at the end of the war be indispensable in the advancement of our economic well-being and in the establishment of an international organization to prevent the recurrence of world wars."

ERIC A. JOHNSTON
President, United States Chamber of Commerce.

"I'd like to see a pact of nonaggression and mutual assistance between management and labor. You can't get rid of management and you can't get rid of unionism in a free country. Both are social economic facts. The right of labor to organize into unions is the legal right of American citizens. I calculate labor will exercise that right."

GEORGE W. NORRIS
Former U. S. Senator from Nebraska.

"I think our own country has got to be very careful lest monopolies and combinations get control of our country after the war. There's always danger of that after a war. The fellows who are making large profits in the war want to keep on doing that. The main thing is to see that trusts and monopolies and cartels do not get control of us just when the war is over."

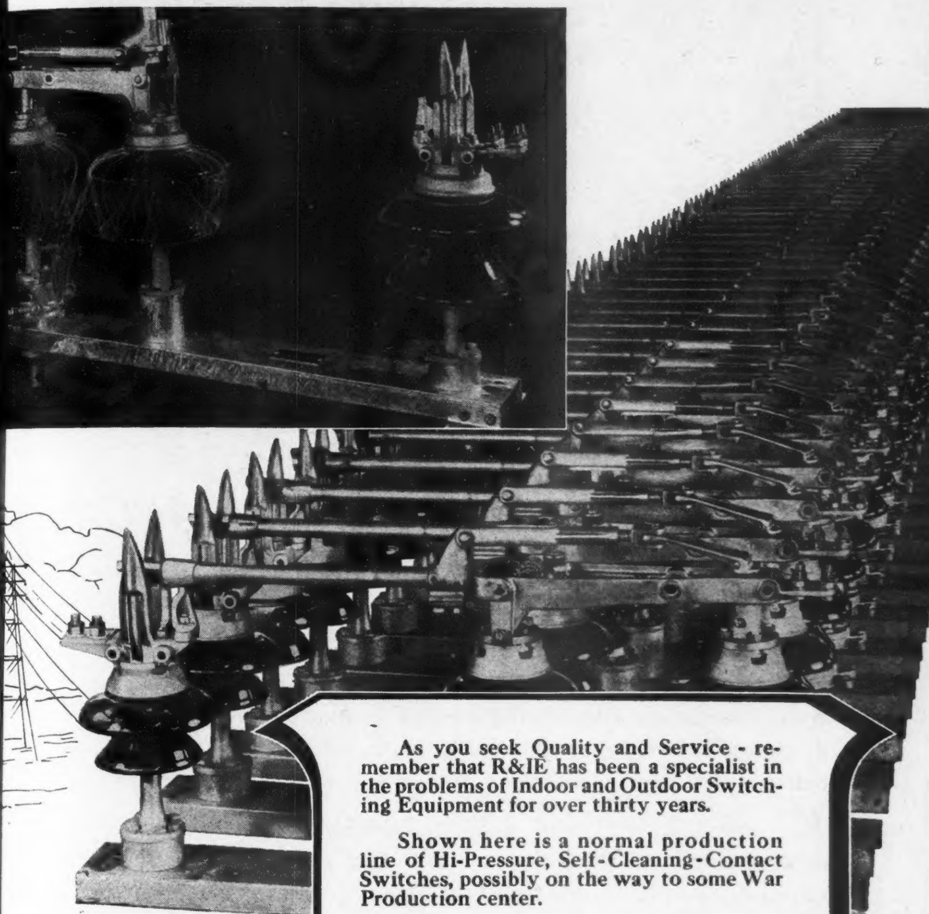
EARL BROWDER
General secretary, Communist party.

"We find in many circles of the capitalist class much keener appreciation of this [labor and industry] problem in its practical terms than we find in most of America's traditional liberals at the present moment, because in these capitalist circles there are men who are really facing these problems in terms of assuming personal responsibility for a favorable outcome for the country."

J. CLIFFORD FOLGER
President, Investment Bankers Association of America.

"The government is already doing most of the borrowing and a good share of the lending. Now if it acquires part ownership of the private investment business—the circle will be complete. It will borrow all the money, it will lend all the money. It will buy all the securities—in which event there will be no more need for winter meetings [of Investment Bankers Association] in Chicago."

R&IE the Switching Equipment SPECIALIST



The Load Tests made during development, during production, and after years of service, demonstrate that Hi-Pressure Contact Switches carry their rated load year in and year out under all service conditions

As you seek Quality and Service - remember that R&IE has been a specialist in the problems of Indoor and Outdoor Switching Equipment for over thirty years.

Shown here is a normal production line of Hi-Pressure, Self-Cleaning-Contact Switches, possibly on the way to some War Production center.

The flashover test, shown at the top, is one of the several methods used to check design and performance.

This same production may be serving you some day when peace-time reconstruction calls for a broader application of reliable switching equipment.

R&IE will continue to specialize in the making of this equipment long after the present War-time emergency.

RAILWAY *and* INDUSTRIAL ENGINEERING COMPANY

GREENSBURG, PA. . . . In Canada—Eastern Power Devices Ltd., Toronto

Cooperating 100% with the War Effort

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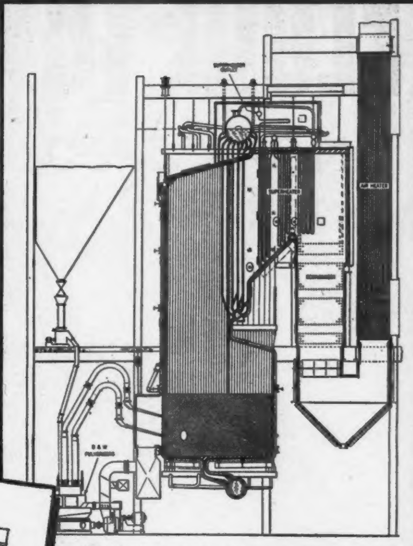
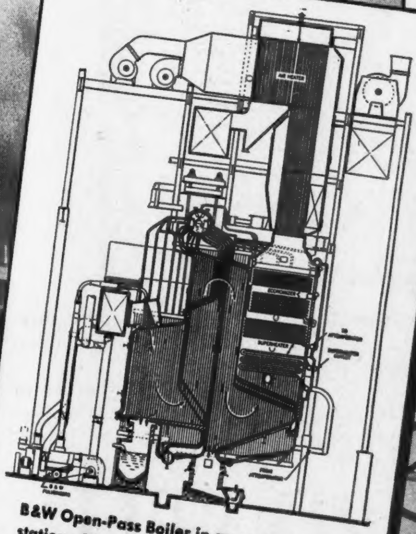
STEAM FOR INDUSTRY'S WAR JOB
Freedom as we have always known it is worth any effort needed to preserve it, and, for that reason, America is today defending with the combined resources of the nation our right to continue living in our established pattern. Industry's part of the war job is its vast production of ships, tanks, guns, and other kinds of fighting machines and materials.
And in the background of this visible and more dramatic production operate the public utilities, supplying unrationed power for both war and civilian needs at a rate never before attained.
Since B&W Boilers are supplying the steam in a large proportion of these pub-
The Army-Navy "E" with two stars and Maritime Commission Award flags are floated proudly at the Barberton Works.
B&W
BABCOCK & WILCOX

lic utility and industrial power plants, and for propelling naval and cargo ships, B&W is playing a substantial part in this great war effort. B&W engineering and production skill have built into its boilers the stamina to endure today's gruelling drive.

With today's accelerated experience yielding more complete answers to such problems as behavior of metals at high temperatures, action of fuels in slag-tap and dry-ash furnaces, circulation in high-capacity high-pressure boilers, separation of steam from water in boiler steam drums, and other related problems, the boilers of tomorrow should be even better able to serve industry.



B&W Radiant Boiler in an eastern central station—Capacity 400,000 lb. steam per hr.



B&W Open-Pass Boiler in an eastern central station—Capacity 350,000 lb. steam per hr.

THE BABCOCK & WILCOX COMPANY
85 LIBERTY STREET NEW YORK 6, N. Y.

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II

Utilities Almanack

Due to war-time travel restriction, conventions listed are subject to cancellation.

MAY

25	Th	¶ *Canadian Gas Association will hold annual convention, Hamilton, Ont., Can., June 8, 1944.*
26	F	¶ *American Management Association will start meeting, New York, N. Y., June 8, 1944.*
27	Sa	¶ *National District Heating Association will hold annual meeting, Pittsburgh, Pa., June 14, 15, 1944.*
28	S	¶ *Iowa Utilities Association will hold Postwar Planning Conference, Des Moines, Iowa, June 19, 20, 1944.*
29	M	¶ *American Society of Agricultural Engineers will hold meeting, Milwaukee, Wis., June 19–21, 1944*
30	Tu	¶ *American Society of Mechanical Engineers will hold meeting, Pittsburgh, Pa., June 19–22, 1944.*
31	W	¶ *Canadian Electrical Association will hold annual meeting, Murray Bay, Que., Can., June 22, 23, 1944.*

JUNE

1	Th	¶ *Canadian Electrical Association will hold annual meeting, Murray Bay, Que., Can., June 22, 23, 1944.*
2	F	¶ *Oregon Independent Telephone Association will hold meeting, Hood River, Or., June 23, 1944.*
3	Sa	¶ *Society for Promotion of Engineering Education will hold meeting, Cincinnati, Ohio, June 25–28, 1944.*
4	S	¶ *American Institute of Electrical Engineers will hold national technical meeting, St. Louis, Mo., June 26–30, 1944.*
5	M	¶ *Advertising Federation of America opens meeting, Chicago, Ill., 1944.*
6	Tu	¶ *Edison Electric Institute opens annual meeting, New York, N. Y., 1944.* ¶ *Public Utilities Advertising Association convenes, Chicago, Ill., 1944.*
7	W	¶ *American Gas Association will hold conference on Operation of Public Utility Motor Vehicles, Philadelphia, Pa., June 27, 1944.*

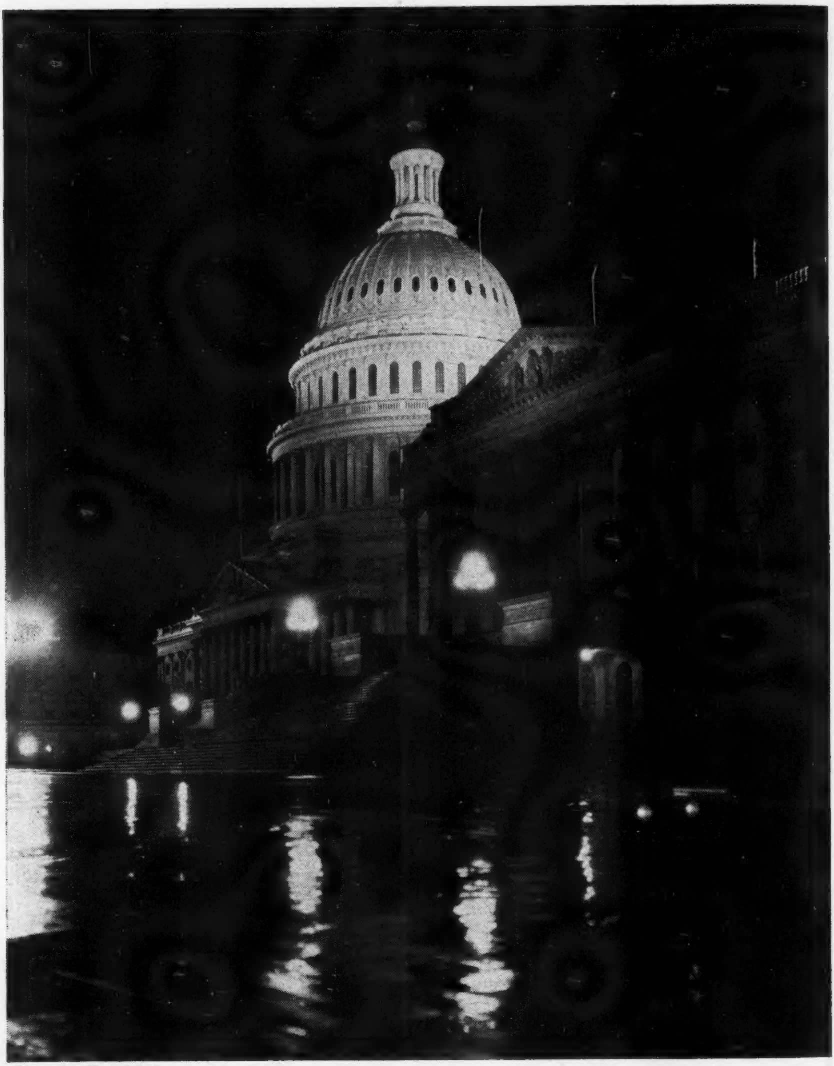


Photo by Horydczak

Capitol at Night

Public Utilities

FORTNIGHTLY

VOL. XXXIII; NO. 11 MAY 25, 1944

New Jersey Adjustment Plan

A new experimental method of solving the troublesome problem of public utility rate regulation considered from the commission standpoint—Introductory statement.

BY JOSEPH E. CONLON

PRESIDENT, NEW JERSEY BOARD OF PUBLIC UTILITY COMMISSIONERS

A PLAN for controlling the revenues of New Jersey Power & Light Company was approved by order of the New Jersey Board of Public Utility Commissioners on March 28, 1944,[1] and subsequently accepted by the company. It is the culmination of about two years of study and discussion between the board and the company. The plan was originally conceived by Dr. J. Rhoads Foster who was then a member of the board's staff. After his resignation he accepted the assignment of completing the job. Malcolm G. Davis, of Gilbert Associates, Inc., represented the company during most of the discussions.

It may be of interest to other regulatory commissions to have a statement concerning the so-called "New Jersey Plan" from a strictly regulatory viewpoint. This involves essentially its limitations and its possibilities.

We have tried, in approving the Plan, to indicate clearly that in its present form it is applicable only to the particular utility involved. The board's order states this specifically.

[1] 53 PUR(NS) 1.

Our hope is, of course, that further developments and study may lead to more general application, but our goal was much more humble.

We were dealing with a utility (a subsidiary of the Associated Gas & Electric system) with a rather bad history. Details are unnecessary but suffice it to say it has had to overcome the effects of the paternal hand of Mr. Hopson who controlled it in the not so distant past. At the same time we were dealing with a utility which for several years had had an intelligent management. Its public relations have been of the best; it has had an advantageous rate schedule; and its promotional sales programs have been effective. Comparatively, its rates have not been excessively high; on the other hand, owing in part to its efficient management, its earnings have been excessive.

In addition, the board was faced with the natural war-time reluctance to institute rate proceedings, as well as with a total absence of objection by customers or municipalities to existing rates. In this respect it is a bit anomalous that at our hearings not a consumer nor a single municipality out of the 103 served appeared in support of or objection to the Plan. The municipalities had been individually informed of the proposed Plan and supplied with a copy prior to the hearing.

I have said that we do not want the impression to be created that the Plan has general application. Two important reasons for this statement are to the credit of the company. The first is that when the Plan was first initiated two years ago a primary premise was reflected in a question put to the company's representatives: "Do you admit that your net operating revenues are too high?" The answer was a categorical "Yes."

The second reason is that, having admitted that its earnings were high, the company made a purely informal agreement—which they have kept like gentlemen—that the Plan should be effective as of January 1, 1942, regardless of the date at which it might be formally adopted. Some speculation must have arisen as to why the company consented to an order transferring $975,000 from its earned surplus to the "stabilizing reserve." The partial answer, aside from the advantage to the company of a substantial balance in the reserve, is that it is the result of this so-called "gentlemen's agreement." The creation of the reserve reflects the admission by the company of excess earnings during the years 1942-1943, which have been allocated to the establishment of the necessary reserve. Without that attitude of the company such a reserve would not have been established at the starting date, and without that reserve the Plan would necessarily have taken a somewhat different form.

If analysis of the Plan indicates that undue concessions have been made by the company or by the board in some of the details it may be said that in other details a *quid pro quo* was provided.

Both the board and the company adopted a realistic approach, and thereby the final result is a fair determination.

The procedures provided by the Plan are not unduly complicated, and I agree with Dr. Foster that accuracy must not be sacrificed for simplicity.

The calculations of an appropriate allowance for the equity capital component of the rate of return are admittedly involved, but rational results are not always attainable by the more obvious methods.

We are optimistic about the outcome of the Plan. We are hopeful that, unless unforeseen circumstances intervene, we have solved the problem of rate regulation of one of our utilities for an indeterminate period. We have been disappointed in one aspect during our adoption proceedings. We had hoped to receive some constructive criticism from within our own state which might have led to some improvements. We have received none. And so, it is adopted as our own creation. We realize it is only a start. In some aspects it is experimental. If other commissions will study it, improve upon it, and apply it, perhaps it will come back to us in an improved form and we may be able to apply it to some of our other utilities.

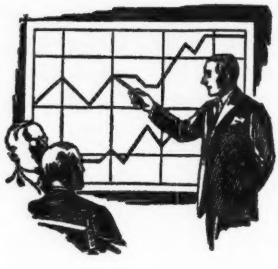
Handling the Shortage of Telephones

SOME interestingly human stories arising out of the handling of civilian demands for telephone service were revealed in a recent address before the Ohio Independent Telephone Association by Leighton H. Peebles, director of the WPB Communications Division. While telephone companies have generally been most successful in dealing with service denials and were complimented on that score by Mr. Peebles, he said that the number of appeals to the communications division has naturally increased as the shortage of telephone instruments becomes more acute throughout the nation. Such appeals to Washington are now averaging about 2,000 a week and only about 25 per cent are being granted by the division.

A number of the appeals are more amusing than convincing. One applicant, for example, while admitting that he did not need a phone for reasons of essential work or health, insisted that he was entitled as an American citizen to have telephone service "before certain foreigners, located on the same street." Another insisted on a telephone extension to a hen house. A woman operating an apartment with her husband complained that lack of a phone in the kitchen resulted in burning up half the food. She concluded, however, "Forget it, I'm not interested."

A young matron in a steel cast as the result of a vertebra injury, whose husband was in a service hospital several hundred miles away recovering from wounds, was denied an appeal based on reasons of health. Two weeks later the appeal was renewed on the claim of "pregnancy." It was again denied.

Mr. Peebles said much pressure is put on friends in Congress or in government agencies to secure concessions by way of telephone service, but that, generally, Senators, Congressmen, and Federal officials had proven most understanding when the reasons for denying service were explained.



Structure and Mechanics of the New Jersey Adjustment Plan

On first inspection, declare the authors, the Plan appears to be complex but, if its essential requirements are kept in mind, its complexities become more superficial than real.

By J. RHOADS FOSTER and MALCOLM G. DAVIS

THE general purpose of the Rate Adjustment Plan recently adopted by the board of public utility commissioners of the state of New Jersey and accepted by New Jersey Power & Light Company for application to the operations of its electric department, is to provide an administratively feasible method under which the rates of the company's electric department may be maintained at a just and reasonable level. This purpose is served by providing, for continuing application, carefully defined rules and procedures. The method is substituted for "regulation by explosion"; it obviates the necessity for protracted rate case hearings.

The Plan provides for an annual determination of just and reasonable rates within the framework of specific rules controlling such determinations and for adjustment of rates by application of a sliding-scale formula. It also creates a stabilizing reserve for the purposes both of avoiding or softening the effect of cyclical fluctuations of actual return above and below the "basic return" level and of avoiding or delaying rate increases which otherwise would be required because of return deficiencies.

Specific provisions are incorporated to anticipate all reasonable possibilities and, thus, the area of probable future controversy is reduced to a minimum. As the result, upon first inspection, the Plan appears to be complex. If its essential requirements are kept in mind, however, its complexities become more superficial than real.

The text of the Plan is reproduced elsewhere in this issue of the FORTNIGHTLY, together with the board or-

der adopting the Plan.[1] Also certain of the basic considerations which led to the adoption of the Plan, as well as a discussion of the feasibility of a more general application of similar measures to other situations, are presented in accompanying articles.

Because of the number of questions which have been addressed both to the board and to the company with respect to the mechanics of the Plan, the writers have deemed it desirable to present a short discussion of its operation, together with an illustrative example based upon wholly hypothetical conditions. Those who have a serious interest in detail may refer to the text of the Plan, in connection with this brief description of structure and mechanics.

Basis of Application

THE financial results of the company's electric operations, for each successive test (calendar) year, are to be considered in relation to the provisions of the Plan as soon as they become known. When this annual review and determination of results indicate that a rate adjustment is required under the provisions of the Plan, the revised rate schedules are to be filed, if possible, by the first of April immediately following the test year.

The Plan establishes all elements necessary for a determination of the reasonableness of existing rates. Thus, the Plan defines the criteria needed for establishing (1) actual income available for return, called the "experienced return," (2) rate base, (3) basic rate of return, (4) basic return, that is, the amount of annual income to be taken as the bench mark of reasonableness of return, and (5) procedures by which differences between experienced return and basic return, either plus or minus, may be translated into rate level adjustments in order to attain the desired end of reasonable rates. Such differences *may not immediately* be translated into rate level adjustments, because of the functioning of the stabilizing reserve, one of the distinctive features of the Plan.

While accounting results are accepted generally for the purposes of the Plan, it is recognized that they are determined by accounting conventions and standards, and, in some respects, would give inappropriate, if not wholly unrealistic, results if accepted for particular economic purposes.[2] In certain phases of its operation the Plan properly deviates from direct or full recognition of accounted-for results.

Experienced Return

IN general the experienced return for each test year is electric utility operating income, as defined by the Uniform System of Accounts, subject, however, to adjustments not necessarily recorded in the operating accounts.

Rate Base

THE rate base for each test year is to be the average of the amounts at the beginning and end of the year, determined from the starting amount of $16,750,000 plus or minus the sum of the net changes in electric utility plant and depreciation reserve, to which amount is to be added average working capital for the year. The $16,750,-

[1] *Re* New Jersey Power & Light Co. (1944) 53 PUR(NS) 1.

[2] Federal Power Commission *v.* Hope Nat. Gas Co. (1944) 320 US 591, 51 PUR(NS) 193. Opinion by Mr. Justice Jackson.

000 starting amount recognizes the inappropriateness of original cost and accounted-for depreciation as the sole measures of value for rate base purposes. In the development of the Plan appropriate recognition was given to elements of prudently incurred historical cost, and customer and investor interests in the reserve for depreciation were treated equitably.

The starting rate base does not, therefore, directly reflect amounts recorded on the company's book. In consideration of the basis upon which the rate of return is established—that is, the historical cost basis—no weight was accorded the estimated cost of reproduction of plant and equipment in the determination of the company's rate base.

TABLE I

1. Determination of Equity Capital Return Rate

Barometer Stock Companies	*Earnings/Price Ratio (Median four denoted by*)* *Year A*	*Year B*	*Year C*
1	7.9	10.8	13.3
2	7.6	8.1*	8.6*
3	5.7	6.6	7.8
4	7.5*	8.2*	7.5
5	5.7	7.9*	8.4*
6	8.4	9.4	9.5*
7	6.8*	6.8	7.9
8	5.3	6.9*	8.9*
9	5.9*	6.0	12.3
10	7.0*	8.3	11.7
Yearly E/P ratio	6.80	7.78	8.85
Average E/P ratio			7.81
Capital structure factor for 30.9% equity capital			1.32
Equity capital return rate for test year "C"			10.31%

2. Determination of Basic Rate of Return

Capitalization *Classification*	*Amount*	*Per Cent of Total*	*Cost-of-Money* *Annual Cost*	*Per Cent Actual*	*Per Cent Weighted*
Debt Capital:					
Bonds, series A 3%	$7,000,000	...	$210,000	...	...
Bonds, series B 3%	3,500,000	...	113,750	...	...
Unamort. d. d. & e.	(995,000)	...	53,630	...	...
Net debt capital	$9,505,000	52.5	$377,380	3.97	2.084
Preferred Stock Capital:					
$4.25 stock-stated value	3,850,000	...	163,625	...	...
Discounts and expense	(835,000)	...	...	...	...
Net pref. stock capital	3,015,000	16.6	163,625	5.43	0.901
Equity Capital:					
Common stock	4,250,000	...	...	...	...
Surplus	1,350,000	...	...	...	...
Total equity capital	$5,600,000	30.9	...	10.31	3.186
Total Capital	$18,120,000	100.0	...	...	6.17%

STRUCTURE AND MECHANICS OF THE NEW JERSEY PLAN

Rate of Return

ONE of the significant innovations embodied in the New Jersey Plan is the formula for determination of the basic rate of return. The historical cost composition of the rate base required, in view of the circumstances, analogous treatment of rate of return in order to establish a reasonable annual return, which is the end of primary consideration.[8]

The rate-of-return formula incorporated in the Plan gives full recognition to all costs prudently experienced, but not amortized to the date of any annual determination, in obtaining debt and preferred stock capital. With respect to the equity capital component, the Plan provides an allowance which gives recognition to the current level of the market for utility equity capital, as well as to the characteristics of the company's capital structure. The equity capital return rate is determined from an average, over a 3-year period, of the earnings-price ratios of a selected group of operating utility company common stocks, adjusted to obtain comparability with the New Jersey Company and its capital structure by application of the so-called capital structure factors. It should be understood that the common stocks used to measure the relative level of the market for equity capital are not treated as though they are comparable with the New Jersey common.

[8] For a discussion of theoretical aspects of the rate-of-return formula, reference may be made to "The Relation of Capital to Utility Rate of Return," Malcolm G. Davis, PUBLIC UTILITIES FORTNIGHTLY, Vol. XXXI, No. 6, p. 342, March 18, 1943; see also "The Problem of the 'Rate of Return' in Public Utility Regulation," Telephone Rate and Research Department, Federal Communications Commission, 1938.

IN order to illustrate the application of the rate-of-return formula, an example based upon a hypothetical but reasonable capital structure, shown in Table I, is offered. The determinations of the equity capital return rate, under assumed market conditions, and of the related basic (over-all) rate of return are set forth in the table in §1 and § 2, respectively.

The over-all rate of return, determined for the above hypothetical capital structure and under the assumed conditions of the equity market, is 6.17 per cent. This is merely illustrative and, in this connection, it is emphasized that the capital structure factors incorporated in the New Jersey Plan are designed for application to that company only and do not necessarily have a more general application.

The basic return, or bench mark for the determination of rate adjustments, is the product of the rate base and basic rate of return, less a 3 per cent interest allowance on the balance in the stabilizing reserve at the beginning of each test year.

Stabilizing Reserve

IN the interest of minimizing the need for rate increases, because of temporary or cyclical fluctuations in earnings, there is incorporated in the Plan a stabilizing reserve which will be accumulated during periods when experienced return is in excess of basic return and, in order to maintain earnings at the basic return level, will be drawn upon when experienced return falls below basic return. Under the circumstances attending the development of the New Jersey Plan there was created a starting balance of $975,000 in the stabilizing reserve, by a transfer

TABLE II

APPLICATION OF RATE ADJUSTMENT PLAN TO HYPOTHETICAL OPERATIONS FOR A 3-YEAR PERIOD

Item	*Application To Assumed Conditions*		
	Test Year C	*Test Year D*	*Test Year E*
1. *Rate Base:*	$20,000,000	$20,200,000	$21,200,000
2. *Stabilizing Reserve Balance:*			
a. Beginning of year	1,000,000	1,198,000	1,212,000
b. Transfer at year end	198,000	14,000	(21,240)
c. After transfer at year end	$ 1,198,000	$ 1,212,000	$ 1,190,760
3. *Basic Return:*			
a. Basic rate of return	6.17%	6.25%	6.05%
b. Item 1 x Item 3 (a)	$ 1,234,000	$ 1,262,500	$ 1,282,600
c. Three per cent of reserve balance	30,000	35,940	36,360
d. Basic return	$ 1,204,000	$ 1,226,560	$ 1,246,240
4. *Experienced Return:*			
a. Actual	1,600,000	1,550,000	1,225,000
b. Adjusted for prior year rate changes (9 *v.* 12 mos.)	1,600,000*	1,520,300	1,179,900
5. *Additional Return or Return Deficiency:*			
a. Actual	396,000	323,440	(21,240)
b. Adjusted	396,000*	293,740	(66,340)
6. *Transfer to or from Reserve:*			
a. Full amount of additional return	0	0	0
b. Up to 50 per cent of add'l. return	198,000	14,000	0
c. To reflect return deficiency	0	0	(21,240)
7. *Adjustment Ratio (Par.23):*	198/396	309.4/323.4	...
8. *Basis of Return Adjustment (Reduction):*			
a. Basis (Item 5 (b) x Item 7)	198,000	281,000	...
b. Amount of adjustment after 60/75/85% formula	118,800	180,450	...
9. *Rate Reductions on Basis of 45% Revenue and Income Taxes—Annual amount to be effective April 1st of following year*	216,000	328,000	0

*It is assumed that no rate adjustment is effective during test year "C."

from the company's earned surplus upon adoption of the Plan.

The Plan provides that any excess of experienced return over basic return, called "additional return," shall be transferred to the stabilizing reserve when the reserve is less than 4½ per cent of the rate base, and that one-half of any additional return will be transferred to the reserve when it is in excess of 4½ per cent but not more than 6 per cent of the rate base. When the 6 per cent level is reached no further transfers are to be made unless the re-

serve is drawn down by subsequent withdrawals to supplement return deficiencies.

Additional return in a test year, not required to be transferred to the stabilizing reserve, becomes the *measure* of a reduction in revenues and experienced return, to be placed into effect during the year following. Any additional return received in a test year and not transferred to the stabilizing reserve is available to the company for general corporate purposes.

When the experienced return of a test year is less than the basic return, the difference, termed "return deficiency," will be offset by transfer of an equivalent amount, up to the limit of any balance in the reserve, to earned surplus from the stabilizing reserve. The transfer thus made will become available for general corporate purposes, including the payment of dividends. When the balance in the stabilizing reserve is reduced to less than 1½ per cent of the rate base, as a result of transfers to surplus to supplement return deficiencies, the company may increase rates in accordance with the specific provisions of the Plan.

Rate Adjustments

Rate reductions are to be made in the year following each test year in which additional return, in excess of amounts required to be transferred to the stabilizing reserve, is experienced. Such reductions are to be made on a basis which will result in lowering the return prospectively to be experienced in subsequent years by an amount equivalent to the additional return thus available, reduced by the sliding-scale factors incorporated in the plan. These factors provide that the amount of the reduction in experienced return shall be 60 per cent of the portion of the unrestricted additional return equal to one per cent or less of rate base, 75 per cent of the next one per cent of the rate base, and 85 per cent of all in excess of the equivalent of 2 per cent of the rate base.

When the balance in the stabilizing reserve has been so reduced by successive return deficiencies that the return deficiency of a particular test year would result in depleting the balance in the reserve to less than 1½ per cent of the rate base, a rate increase may be made. The measure of the amount of any calculated increase which may be made in future annual experienced returns, by means of an increase in rates, is determined by the relationship of return deficiency to the balance in the stabilizing reserve (before debits to the reserve on account of such return deficiency) as follows:

(1) no increase on account of all or any portion of the return deficiency equal to the balance in the stabilizing reserve that is in excess of 1½ per cent of the rate base;

(2) an increase equal to 50 per cent of any remaining portion of the return deficiency that is equal to all or any part of the balance in the stabilizing reserve up to 1½ per cent of rate base; and

(3) an increase equal to 100 per cent of any remaining portion of the return deficiency that is in excess of the total balance in the stabilizing reserve.

In all cases required adjustments to experienced return are translated to reductions or increases in revenues—that is, changes in rate levels—by giving effect to taxes upon revenue and income at the rates in effect for the test year.

Also, the experienced return and associated additional return deficiency are adjusted to the basis of a full twelve months' application of any revised rates that may have been placed in effect during the test year, before being taken as the measure of the adjustment to be made in the potential earnings and revenues of subsequent years.

Example of Application of Plan

THE application of the Plan to hypothetical data is presented in Table II in order to illustrate its operation (page 670).

Certain basic assumptions as to rate base, condition of stabilizing reserve, rate of return, and experienced return are made and are set out in the tabulation. Reference to the assumed bases indicates that a mild increase in sales presumably occurred in year D over year C, and that either a recession in sales or a disproportionate increase in costs occurred in year E over year D. It is believed that this statement of assumptions, together with reference to the pertinent sections of the Plan, will make these calculations a clear and adequate illustration of the operation of the Plan. (See Table II.)

"THE trend, or more correctly speaking, the stampede toward centralized government in this nation is a cause for grave concern and genuine alarm, and a hundred-fold greater now than when Governor Roosevelt pointed it out as a dangerous tendency some years ago. It was a tendency then; it is a stampede now. Since then the tempo toward concentration has been greatly accelerated. Always in history as the processes of concentration of government have progressed, the freedom and liberty of the people have diminished; conversely, as government has been decentralized, liberty has gained. The Habeas Corpus Act, the Magna Carta, the Petition of Rights, and our own Declaration of Independence, were all instruments to decentralize government; in their wake came liberty and freedom. The growth of bureaucratic and concentrated government in the United States already has marked the decline of liberty. If that decline is to be halted, the people, the Congress, and the states must be aroused from their lethargy and resist as they resisted King George III."

Rationale of the New Jersey Adjustment Plan

In the opinion of the author the Plan provides an avenue of escape from the frequently time-consuming, costly, and uncertain experience with rate case proceedings.

By J. RHOADS FOSTER*

THE Plan is not in the form of a contract. It is a revised or different method of establishing and maintaining reasonable rates,[1] made effective in the case of the electric department of the New Jersey Power & Light Company by order of the board, under its general power to fix just and reasonable rates, and acceptance of the order by the utility.

The Plan substitutes continuity for lack of continuity in the rate-making process; it is regarded as a means of avoiding use of the traditional but intermittent and unsystematic rate case method.

Due process demands that the method of rate making "shall not be arbitrary or capricious and the means selected shall have a real and substantial relation to the objectives sought to be obtained."[2] The result of the rate-making process should be reasonable but "the Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas," and "regulatory agencies are free to make the pragmatic adjustments which may be called for by particular circumstances."[3] In the Hope Natural Gas Company Case the court reiterated that "Under the statutory

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*Department of Public Utilities and Transportation, New York University. The author represented the New Jersey Board of Public Utility Commissioners in the proceeding with regard to the Rate Adjustment Plan which has become effective as of January 1, 1944. The opinions expressed in this article, however, are not necessarily those of the board.

[1] The Rate Adjustment Plan is a method of rate regulation, if the meaning of the term "rate regulation" is limited to determination of the reasonable return. Questions of service classification, of rate schedule design, and of terms and conditions of service are outside the scope of the Plan but continue subject to regulation by the board under its general powers.

[2] Nebbia *v.* New York (1934) 291 US 502, 525, 2 PUR(NS) 337.

[3] Federal Power Commission *v.* Natural Gas Pipeline Co. of America (1942) 315 US 575, 586, 42 PUR(NS) 129, 137.

standard of 'just and reasonable' it is the result reached, not the method employed, which is controlling." [4]

The latitude available for exercise of administrative discretion as to method varies among the state jurisdictions, depending upon the provisions of regulatory statutes and state constitutions and the interpretative decisions of state courts. The trend toward recognition of a wider administrative discretion is general, however, and it is believed that, if available as a method within the scope of regulatory powers, the Plan provides easier and more effective procedures of rate regulation.

Administrative Advantages

THE Plan provides an avenue of escape from the frequently time-consuming, costly, and uncertain experience with rate case proceedings. Relatively simple but definite rules and standards are provided for annual revision and adjustment of the return, when adjustment is required, on the basis of operating results experienced during each preceding calendar year.

Effective regulation by the rate case method requires estimates of operating revenues and operating revenue deductions for a period in the immediate future. Such estimates often are unreliable forecasts, particularly when cost levels are unstable or when the effect of business cycle changes or rate structure changes on volume or sales is a factor. The stabilizing reserve provided by the Plan, together with the sliding-scale arrangement, makes it possible to base the adjustment of rates upon the operating results of the previous year. If the experienced return is tending to increase, further rate reductions will be effective a year later, or a part of the additional return may be credited to the stabilizing return.

If the trend is in the opposite direction and the experienced return is less than the basic return, the deficiency is made up by a transfer from the stabilizing reserve.

The rate base is adjusted annually by application of a simple formula. This administrative advantage is similar to the advantage sought by the proposed adoption of prudent investment as a formula for the purpose of rate case proceedings.

A gain in effectiveness of rate regulation may be expected to reflect any such gain in administrative practicability. A greater simplicity of method, however, is not justifiable if obtained at the expense of sacrifice in reasonableness or refinement of result.

A sliding-scale contract or other method of rate regulation, such as the Plan, cannot supersede the requirements of law and cannot release a regulatory agency from its statutory duty to fix just and reasonable rates. The Plan is a series of rules or formulae which do not and cannot reduce the rate-making process to a bookkeeping routine, and any method of rate regulation embodying formulae such as are found in the Plan must be subjected to continuous review with regard to reasonableness of its results.

Responsibility for Reasonable Results

THE scope of judicial review of administrative determinations under the Federal Constitution appears to be sharply limited in contrast with the earlier practice. The rule of administra-

[4] (1944) 320 US 591, 51 PUR(NS) 193, 200.

tive finality now accepted by the courts places unprecedented responsibility upon the administrative tribunals. A utility taking an appeal from arbitrary or unreasonable regulatory action carries the heavy burden of offsetting the presumption that the commission's order is not confiscatory.

Reasonableness of the "end result" is implied as a standard to be recognized by the courts but no criteria have been identified by the Supreme Court which may be readily applied by either commission or court. As Mr. Justice Jackson said in his dissent in the Hope Natural Gas decision: "The court sustains this order as reasonable, but what makes it so or what could possibly make it otherwise, I cannot learn." It is unnecessary to answer the question of whether the courts or the administrative agencies are depositories of greater wisdom. Unless administrative finality is combined with a strong sense of responsibility for reasonable results, unwise regulatory policies might be pursued for years, at least until the unfortunate effects upon the financial well-being of the enterprise are compellingly apparent.

The existing degree of administrative absolutism places a heavy responsibility upon the commission to protect the long-run as well as the short-run interests of the public. The judicial function is no less essential than before; its exercise is now largely in the keeping of the administrative agency, which is responsible as well for adequacy of representation of the public interest.

THIS responsibility for reasonable results may be an especially heavy burden on state commissions, in view of the trend toward centralizing regulatory authority and responsibility at the Federal level. It may be contended with reason that a determination as to whether or not the Federal government should regulate local utilities should not turn upon the effectiveness of regulation by individual states. Unless the consequences of inaction affect the welfare of people in other states, the effectiveness of regulation should be of concern only to citizens of the particular state. When a state loses responsibility it can no longer realize the advantage of experimentation or develop the proficiency in democratic government which depends upon accessibility of the administrative authority to public-spirited citizens.

Although this view may be sound in theory, it is true also that an under-

¶ *". . . responsibility for reasonable results may be an especially heavy burden on state commissions, in view of the trend toward centralizing regulatory authority and responsibility at the Federal level. It may be contended with reason that a determination as to whether or not the Federal government should regulate local utilities should not turn upon the effectiveness of regulation by individual states. Unless the consequences of inaction affect the welfare of people in other states, the effectiveness of regulation should be of concern only to citizens of the particular state."*

standable impatience with certain frailties of state commission regulation has given force to contentions of those predisposed toward centralization.

The Rate Adjustment Plan has been developed in the spirit of the thought that the authority and dignity of state government are indispensable to our democratic system. Its adoption by the New Jersey board was an exercise of its responsibility to act in the public interest and required the unusual courage which does not turn from the risks of experimentation.

A Fair Return

THE rate base corresponds generally to the amount prudently invested in property now used and useful in supplying electric service. It rejects the idea that the rate base should be limited to amounts originally invested by the first person devoting the existing property to the public service. The concept of "prudency" is regarded as meaning that the rate base should not include wasteful or unreasonable expenditures. It is not construed as meaning that a rule of hindsight rather than of foresight should be applied in rate base determination.

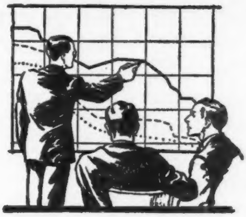
The deduction to reflect depreciation is in two parts for the purpose of the starting rate base: (a) the estimated actual depreciation in the plant expressed in terms of "original cost" dollars, and (b) a further deduction which recognizes that the accumulated reserve is in excess of the estimated existing depreciation and that customers should, in effect, be allowed a moderate return on this advance of additional investment funds.

It is the fair return which is most significant in rate making, neither the rate base nor the rate of return allowance standing alone. The prudent investment rate base established by the Plan is appropriate not because of any inherent merit (other than the advantage of administrative practicability) but because, in relation to other provisions of the Plan, it will yield reasonable results under the given circumstances.

The basic rate of return provided by the Plan includes full recognition of prudent actual cost of capital represented by bonds and preferred stock. Under the circumstances, if the rate of return were to be based on an imputed current cost of debt and preferred stock capital and applied to a rate base corresponding to the evidence of prudent investment, the result would be less than a fair and reasonable annual return.

THE reasonableness and acceptability of prudent investment as the rate base also are influenced by availability to the company of returns in excess of the "basic return." The basic return for a test year is equal to the rate base multiplied by the basic rate of return, minus a credit on behalf of customers equal to 3 per cent of the balance in the stabilizing reserve at the beginning of the test year. The fair return provided by the Plan is the basic return plus such amounts of additional return as may become available for corporate purposes under the provisions affecting the stabilizing reserve and adjustment of rates.

A prudent investment rate base and a rate of return which vary with (a) historical cost of fixed-income capital and (b) the current cost of equity capital will not give to investors a re-



Development of Rate Adjustment Plan

"THE *Rate Adjustment Plan has been developed in the spirit of the thought that the authority and dignity of state government are indispensable to our democratic system. Its adoption by the New Jersey board was an exercise of its responsibility to act in the public interest and required the unusual courage which does not turn from the risks of experimentation.*"

turn with a purchasing power equal to that represented by the same dollars of return at the time the investment was made. The contracts of bond and preferred stock investors do not provide a return adjusted to changes in returns available from alternative opportunities for investment. They do not expect such adjustment of their fixed dollar returns. The case tends to be different with equity investors, whose rights to a return are residual and whose function is to assume in largest part the risks inherent in changing price levels and changing economic conditions.

FOR this reason, the equity capital cost rate is made to vary with changes in the rate of return available from alternative investments of similar risks.

The variable rate of return is applied, however, to a stable rate base expressed in terms of past costs, not in terms of dollars with an equivalent present-day purchasing power. Adjustment of the rate base to present-day purchasing power is not administratively feasible. It is believed that the increased stability of return to common stockholders, provided by the stabilizing reserve and other provisions of the Plan, makes wholly unnecessary any adjustment of the rate base to changing purchasing power, unless in the event of an extreme price level movement.

It would be unfortunate if the striving for increased administrative practicability should throw the process of rate base determination into the rigid mold of adherence to any given formula, such as prudent investment. If such a trend does develop, however, it is possible that the gain in certainty of return provided by methods such as the Plan may tend to compensate for what would otherwise be a possible inadequacy of return. In this event, the

changed method might contribute to survival of private ownership.

Advantages to Customers and Owners

ASSUMING that the rate case method of rate regulation were continuous and effective, electric rates would tend to be reduced during periods of expanding business and to be increased during depression periods. That is, the standard of limitation to a "fair return" at the time of the proceeding or in the immediate future is not adjusted to the facts of the business cycle. Under the customary standard, rates would tend to be increased at the very time when purchasing power is curtailed, when higher rates have an adverse promotional effect, tend to retard recovery, and have an adverse effect on public relations.

A sliding-scale arrangement without a stabilizing reserve would have similar undesirable results in typical circumstances. It would give a prompt annual adjustment of rates based upon the excess or deficiency of experienced return. Therefore, the stabilizing reserve is an essential and protective feature of the Plan; means ought to be devised to make regulation continuously effective and at the same time avoid raising rates in the midst of a severe business depression.[5]

The stabilizing reserve will function within the limits of its capacity to maintain the actual return at the level of the basic return. Income available for payment of common dividends will be maintained at a normal level without rate increases in the event of adverse business conditions.

AS a result of such an increase in stability of return, it may be assumed that investors will expect a lesser annual return per dollar of capital committed to the enterprise. The return necessary to obtain a continuing flow of needed investment capital at a reasonable supply price is a cost of supplying utility service. A reduction in that cost should be reflected in correspondingly lower rates for service, except to the extent that the idea of reward for managerial contributions to reduction of cost may be a factor.

Since under the Plan the equity capital cost rate is adjusted to changing investor appraisal of other utility situations, any element of increased assurance of return resulting from operation of the stabilizing reserve is not reflected in a lower *equity* capital cost rate. The Plan is an experiment, however, and the company should not be asked to assume the risk of its failure without being allowed to retain, at least for a period, the gains which in this respect may arise from its success.

The advantages made available to customers by other provisions of the Plan are substantial. They are summarized by the confident expectation that, if the Plan continues effective, the relative costs of supplying service will be reduced and New Jersey Power & Light Company within a few years will have substantially lower offering prices for electric service.

[5] It is true that under the Washington Plan, without the stabilizing reserve, rate reductions were experienced annually throughout the last great depression. The market served by the electric utility in the District of Columbia, however, is in substantial proportion residential. It is a compact market, of nearly the highest quality in the country, which grew extensively during the depression. Few other electric utilities possess this favorable combination of circumstances. It made possible continued rate reductions and contributed to the popularity of the sliding-scale arrangement in the District of Columbia.

Initiative in Management

As the guest of honor at a testimonial dinner in Washington on February 17th (the evening before he became fatally ill), to commemorate his twenty-five years as a member of the Interstate Commerce Commission, Joseph B. Eastman enumerated twelve things which he said constituted the essence of his experience. The twelfth was stated as follows:

> One of the great dangers in public regulation by administrative tribunals of business concerns is the resulting division of responsibility, as between the managements and the regulators, for the successful functioning of these concerns. For example, there was a tendency at one time, and it may still exist, on the part of those financially interested in the railroads to think of the financial success of those properties solely in terms of rates and wages and the treatment of rates and wages by public authorities. Sight was lost of the essentiality of constant, unremitting enterprise and initiative in management. The importance of sound public regulation cannot be minimized, but it must not be magnified to the exclusion of those factors in financial success upon which ordinary private business must rely.

In theory, the rate case method of rate regulation limits the earnings of a utility to a "fair return." The presence of any excess over this return indicates that a reduction in rates is in order. If there were no lags in the effectiveness of regulation on this basis, there would exist no *financial* incentive for management to strive for increased efficiency.

The benefits of any additional economies would go promptly and in full to consumers. Regulation has not had this result in its actual practice; the lags and uncertainties of the regulatory processes often have resulted in substantial excesses over a fair return being retained by utilities.

Adoption of more effective methods of rate regulation requires that careful consideration be given to their effect on efficiency of management and on the means of discouraging inefficiency.

The Plan provides that for each test year any amount of return in excess of the "basic return," if not required to be credited to the stabilizing reserve, shall be available to the company for general corporate purposes. Such amounts of additional return are the basis of rate reductions, determined by application of the sliding-scale percentages.

The relationship between the income available to stockholders and the amounts of rate reductions is a strong incentive provided by the Plan for additional managerial accomplishments and will encourage the management to identify its interests with the interests of customers in lower rates.

"Over-the-dam" Rule

Commissions generally have adhered to the rule expressed in New Jersey Public Utility Comrs. *v.*

¶ "In *theory, the rate case method of rate regulation limits the earnings of a utility to a 'fair return.' The presence of any excess over this return indicates that a reduction in rates is in order. If there were no lags in the effectiveness of regulation on this basis, there would exist no* FINANCIAL *incentive for management to strive for increased efficiency."*

New York Teleph. Co.[6] and other decisions that whether or not a utility's return was excessive or inadequate in the past has no bearing upon a rate determination for the present or future. In the Hope Natural Gas Company decision, however, the majority of the court repudiated the "over-the-dam" rule.

Without implying agreement with the treatment of well-drilling and other costs in rate base determination under the circumstances of the Hope Case, it may be pointed out that the provision of a stabilizing reserve by the Plan disregards the "over-the-dam" rule. The charges for electric service in any given year under the Plan may yield a return which in that year is either more or less than a "fair return" under the rate case standard. The end result of a "fair return" is reached only over a period longer than one year so far as utility operating income is concerned. Otherwise the purposes of increased stability, decreased cost of service, and lower rates, and avoidance of the uneconomic effect of rate increase during hard times are beyond reach.

It is expected that this disregard for the "over-the-dam" rule may encourage a more intensive development of the market for service than would otherwise be possible. It is known that the demand in segments of the market for electric service is in some degree elastic. In the different segments of the market the demands are not the same at one rate level as at another; a given operating revenue may be produced by more than one pattern of rates.

THE increase of demand which will result from reduction of offering prices always is problematical. The possibility of a limited response and a consequent inadequate return always has been a reason available to management for not "taking a chance." The existence of a stabilizing reserve, which makes the return in part independent of the rates charged at a given time, may encourage study of the influence of price changes and promotional activities on demand for different uses, and study of relationships between service rates and business cycle.

The continued decline in the price of electric service has depended upon the character of the electric utility as a business of decreasing unit cost with increasing scale of operations. The marketing function was relatively unimportant until recent years; but opportunities for further extensive growth have now nearly disappeared. Increased managerial attention to promotional policies and practices may be expected to play a major part in the prospective, further intensive development.

[6] 271 US 23, 31, PUR1926C 740.

TELEPHONE ADVERTISING IN 1902. *"Wise burglers shun residences having telephone service." A company folder displays a picture showing a Gibson girl version of a pretty bride calling her husband's downtown office from a wall phone in her home. The caption: "His voice comes over just as plain, my dear." Another picture shows hubby's efficient PBX Miss Smith, complete with towering pompadour, hour-glass waist, and balloon skirt.*

Regulation by Formula—New Jersey Adjustment Plan

As in all problems of regulation, declares the author, the conditions peculiar to each situation must be considered fully before an adequate feasible solution of the particular problems can be reached.

By MALCOLM G. DAVIS

The regulation of earnings and rate levels of public utility corporations by a formalized set of rules is not a new departure in the field of regulatory practice. Such methods have been in use with respect to the operations of various utilities since the early development of regulatory methods. Among the better-known plans are those now in effect in Washington, D. C., both for the electric and gas utilities, in Houston, Texas, and in England with respect to the operations of certain gas corporations. A few such plans have heretofore been in use for varying periods, only to be discarded, and, in "local ordinance" states, several rate ordinances have been adopted with specific provisions relating to progressive revisions of rates and, therefore, have contained certain of the elements of the rate adjustment plan method.

Any formalized plan for the "automatic" regulation and adjustment of public utility rates must be constructed within the framework of the laws and regulatory practices of the state or community within which the utility, whose rates are to be regulated, operates.

The success of any such plan depends almost wholly upon the good will and intellectual integrity of the regulatory body and of the utility that are parties to its adoption and continued operation. None of the state or Federal laws pertaining to the regulation of public utility enterprises requires that formalized arrangements be adopted to implement the regulatory procedures; hence, all such plans must develop through voluntary agreement of the regulator and the regulated to accept the end results of the specific formulae adopted.

In general, rate adjustment plans do not come into being as agreements in the legal sense, because the majority of regulatory bodies are not em-

powered to enter into contractual arrangements with the utilities under their jurisdiction. However, the provisions of any plan that may be adopted by a regulatory body and accepted by a utility are morally binding upon both parties, so long as the plan continues in force and effect. On the other hand, the administration of the provisions of such a plan becomes the duty of the regulatory body and it must be assumed, therefore, that the utility or the public may seek relief in the courts if it is believed that the plan has been applied incorrectly or improperly to the disadvantage of either of the interested parties.

In the instance of the New Jersey Plan it will be found, by reference to the record, that it was developed through a process of working out mutually acceptable bases for each of the several phases of the Plan, to the end that the over-all results would be reasonable and acceptable. Only by the pragmatic test of over-all reasonableness can any formula of regulation be judged.

Recognition of the impossibility of foreseeing all eventualities is contained in the New Jersey Plan by providing specific mechanisms for its modification and for its termination, either by the board or the company, in the event that the results of the operation of the Plan prove to be unsatisfactory. In the event of termination of the Plan regulation is to return to standard procedures without prejudice to either party.

Feasibility of Rate Adjustment Plans

A RATE adjustment plan is neither more nor less than regulation formalized by a series of explicit definitions, which, because of the elimination of time-consuming legal proceedings, accelerate the regulatory processes. From the standpoint of the public, whose interests presumably lie in obtaining adequate service at reasonable prices, although not necessarily at progressively lower prices, this result should be satisfactory. On the other hand the investors in public utility securities, who have made it possible for the public to obtain the desired service, are properly interested in maintaining revenues and earnings at levels which will provide a fair and reasonable return; if a plan succeeds in attaining this end it should be acceptable to the investor interest.

IN actual practice the consumer interest, at least as expressed by those who seem to be ever present to champion it, particularly if by so doing a political advantage can be gained, may appear to be solely in progressively lower rates. Thus, any reasonable plan, which contains a 2-way street for rate adjustments, may be subjected to severe criticism and concerted action for modification when a rate increase is called for under its provisions. Such criticism may well arise even though the need for increased rates is a direct result of the fact that the attained level of rates, due to prior reductions, is no longer adequate to provide a fair and reasonable return in the face of increasing costs, declining sales, or a combination of both. Situations of this type have recently developed in relation to the two plans that have been in effect for some years in the District of Columbia and which, by all reasonable criteria, have operated to the definite advantage of the consuming public. This latter conclusion is especially ap-

parent when the results attained under these two plans are measured by the pragmatic tests of either proportionate reductions in rate levels over a period of years, or the actual levels of charges for service.

THESE recent experiences with rate adjustment plans, when affected by adverse conditions, and the indicated difficulty of maintaining the effectiveness of provisions which permit increases in rate levels when needed, cast a serious doubt upon the practical value of such provisions to the utility. However, in the Washington situation it may well be noted that a majority of the commission properly upheld the validity of the provisions of the plan applicable to the operations of the gas company in the face of sharp and concentrated opposition. This fact is reassuring both to those interested in the maintenance of fair and objective regulatory treatment and to those utilities and commissions that may be considering the feasibility of adopting formalized methods of rate regulation.

Because rate adjustment plans establish specific and definite provisions, within which regulatory procedure is channelized, there is lost that degree of flexibility which exists in the usual regulatory methods. Thus, under standard regulatory procedure a commission can take judicial notice of both past and prospective future conditions, in determining its course of action in any particular case. The freedom to apply some measure of judgment is particularly important in relation to those utilities whose revenues and earnings are subject to wide variations because of fluctuations in economic conditions, or because of other factors beyond the control of either utility or regulatory body.

A FORMALIZED rate plan applied to a situation of the latter type, even though the plan might contain an earnings stabilizing reserve of the type embodied in the New Jersey Plan, might well result in successive reversals in the trend of rate levels to the detriment of the utility involved and to the annoyance of its customers. Under normal regulatory procedures such reversals ordinarily would not occur because intelligent regulation, with a proper realization of its responsibilities to consumers and investors, would recognize the necessity of earnings reasonably in excess of a "fair return" during the peak periods of the recurring cycle of earnings, to offset deficiencies that must be expected to occur during the declining phase of the cycle. Thus, it is doubtful if formalized rate adjustment plans can be applied successfully

¶ "A RATE *adjustment plan, in order to be successful, must be reasonable and must provide adequate recognition of the rights of all interests. While the end result of the application of a plan to the operations of a particular utility is the overall measure of reasonableness, it is also necessary that the component provisions of the plan be equitable when considered in relation one to the other and to the plan as a whole."*

to utilities receiving comparatively large portions of revenues from heavy industrial business that is subject to violent fluctuations as a result of shifting economic conditions.

Another type of situation for which the rate plan method of regulation is not practicable is that of the utility with comparatively low rates and an indicated saturation of available markets and a consequent absence of any practical possibility of further sales expansion.

FROM a public relations standpoint the initial and continuing acceptance of any formal plan of regulation is dependent upon more or less immediate evidence of its effectiveness, which effectiveness will be measured, at least during the "honeymoon" period, by the ability of the plan to produce progressive reductions in rate levels. The utility that has reached the point of diminishing returns with respect to rate reductions and promotional activities, or the utility that is faced with the immediate necessity of a rate increase most certainly cannot operate successfully under any formalized plans for rate adjustments.

The preceding discussion leads to the conclusion that formalized rate adjustment plans can be applied effectively and successfully only to certain utilities, the operations of which are not subject to violent cyclical fluctuations and which have not closely approached the asymptotes of the curves of declining rate levels and expanding markets and sales volumes. However, even under apparently ideal circumstances there are many other factors that must be evaluated by both regulation and management in seeking a decision as to the feasibility of a formalized rate adjustment plan to be applied to any particular situation. Of major importance, in this respect, is the loss of flexibility in regulation that exists under the classical methods but which is largely absent in the formalized plan.

Reasonableness of Rate Adjustment Plan

A RATE adjustment plan, in order to be successful, must be reasonable and must provide adequate recognition of the rights of all interests. While the end result of the application of a plan to the operations of a particular utility is the over-all measure of reasonableness, it is also necessary that the component provisions of the plan be equitable when considered in relation one to the other and to the plan as a whole.

Thus, the determinations of rate base and rate of return should be reasonable, in relation one to the other, in order that the end result—that is, the annual dollar return—may be fair and adequate. Similarly, recognition must be taken of the need for adequate incentives to management and employees in the selection of the factors by which a return in excess of, or less than the basic measure of, fair return is translated into rate level adjustments.

If a rate plan acts to reduce and hold revenues and earnings at levels which will afford nothing more than a nonconfiscatory return, then adequate incentives to management and to new capital have been removed and the utility is headed toward a static, rather than a dynamic, future. In order to avoid this condition it is necessary that proper incentives be provided in terms of adequacy of return in order to in-

duce a continuing development of the business, which development and expansion, in the long-term view, will redound to the benefit of the consuming public.

It has become fashionable with the courts (and certain commissions) to measure the propriety of regulatory actions by the "reasonableness" of the prospective results. Unfortunately the term "reasonable" is vague and inexact to the end that that which may be reasonable according to one school of thought may be wholly unrealistic and unreasonable according to another. Economic factors cannot properly be measured by inexact terms. There exist rational techniques for evaluating economic conditions with exactness and where such techniques are available they should be used. This applies particularly to the related matters of rate base and rate of return, as well as to the accounting methods applied to other aspects of the total problem of establishing a basis upon which to control the rates and earnings of a public utility enterprise. In applying such techniques it is necessary that consistency of result be given primary consideration.

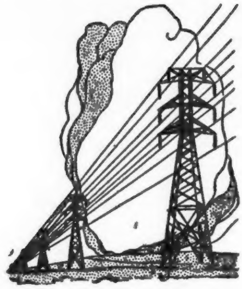
In the development of the New Jersey Plan the related elements of rate base and rate of return were established upon what may be termed the "historical cost" basis. This method recognized costs prudently incurred in constructing and acquiring utility plant and in obtaining capital funds to finance the development and continuation of the property as an operating unit. One possible deficiency in the Plan as finally formulated is the absence of any specific provision to provide for necessary adjustments in rate base in the event of violent and permanent dislocations of price levels. To some extent, however, compensation for this potentiality is obtained in the rate of return formula which provides for variations in return level, geared to changes in the cost of senior capital and in the level of the equity capital market.

Although the incentive provisions of the New Jersey Plan may not be as liberal as could be justified in the light of past and prospective future developments, when these provisions are considered in relation to the establishment of an earnings stabilizing reserve it is probable that reasonable recognition of this essential problem has been incorporated in the Plan.

Particular note also should be taken of the stabilizing reserve which represents a distinct departure from previously adopted plans. While the use of stabilizing reserves is not new, particularly in the instances of electric utilities with large hydro-generating resources, subject to wide output variations, the inclusion of such a provision in the New Jersey Plan is believed to be a definite improvement over previous plans, in that it will tend to minimize the potential need for future rate increases, particularly those that might be engendered by short-term business cycles.

Certainly there is no one formula which can be applied with mathematical exactness.

As in all problems of regulation the conditions peculiar to each situation must be considered.



A Century of Telegraphy

The Morse invention and early struggles and development of the pioneer electrical communications industry, inaugurated by the historic message flashed between Washington and Baltimore

BY FRANCIS X. WELCH

ONE hundred years ago the first telegram flashed between the Capitol building in Washington and the Baltimore & Ohio Railroad station in Baltimore was the historic message, "What Hath God Wrought?" So rapid has been the progress and maturity of the telegraph industry that its hundredth birthday witnesses a governmentally approved consolidation of its domestic business and a gradually unfolding tangle of financial complications which might well lead observers to wonder "What hath Western Union bought?"

Consolidation of the nation's telegraph industry, however, far from presaging any decline in the earliest form of an electro-communication business, is generally regarded as being a prelude to a similar consolidation of international American communication interests. And there is every reason to believe that in the postwar period American telegraphy will emerge, strong and streamlined, to continue to carry, in peace, the burden of communication responsibility which it is carrying so well in war.

Congressional recognition of telegraphy's one hundredth birthday will witness the unveiling of a plaque commemorating the sending of the first message by its inventor, Samuel Finley Breese Morse. The life of Morse, the inventor, added to the century of progress in American telegraphy, spans, in a fascinating way, the entire history of the American Republic to date. Morse, the son of a literary clergyman and a great grandson on his mother's side of Dr. Samuel Finley, early president of Princeton University, was born on April 27, 1791, at Charleston, Mass.

Morse's father was a friend of George Washington and Daniel Webster.

Painting was Morse's principal ambition. His dabbling with electricity a mere avocation. But art, even at that early date, paid slim returns, although Morse gained some fame as a portrait painter, and included among his subjects President James Monroe; his full-length painting of General LaFayette still hangs in New York city hall.

After the death of his young wife, the former Lucretia P. Walker of Concord, New Hampshire, whom he had married in 1819, Morse went to Europe to continue art studies. At the same time he happened to witness Chappe's semaphore system of signals which lined some of the highways leading from Paris, the most efficient visual communications system of its day. It got Morse to thinking.

WHILE returning from Europe in 1832 on the sailing ship *"Sully"* he met Dr. Charles T. Jackson of Boston, who brought to his attention the marvels of the electromagnet. Upon being informed that electricity would travel many miles by wire almost instantaneously, Morse conceived his idea of dot-and-dash communication which he jotted down in an artist's sketchbook, still preserved in the National Museum in Washington, D. C.

Upon his return to New York, he was bothered by his chronic trouble—financial worries. He was forced to paint for his living, and there was a lapse of three years before he did anything more about his electromagnetic telegraph idea. In 1835, he began work as professor of the literature of arts of designs of New York University, for which he received no salary but collected fees from his students and was provided with quarters in the university's building on Washington square. During the winter of 1835-1836 he built his first telegraph instruments and carried on his experiments.

By September, 1837, Morse had worked out a crude model capable of sending signals throughout 1,700 feet of wire stretched around his room at New York University. A personal friend, Alfred Vail of Morristown, New Jersey, undertook to find a financial sponsor. His father, Judge Stephen Vail, advanced $2,000 and machine shop facilities at his own Speedwell Iron Works, Morristown, where 3 miles of wire were stretched around the Morristown factory. A satisfactory test convinced Judge Vail that he was not wasting his money. Other successful demonstrations followed, with considerable publicity, but the public's attitude generally was one of good-natured cynicism.

A 10-mile test in Washington before President Van Buren and his cabinet resulted in the introduction of a bill by Representative F. O. J. Smith, chairman of the House Committee on Commerce, for an appropriation to construct an experimental line. Congress hesitated for nearly five years, while Morse and his friends kept up their campaign.

Meantime, Morse attempted to obtain an English patent and find support for his telegraph there. He was turned down because two Englishmen, Wheatstone and Cooke, had built a magnetic needle telegraph quite different from Morse's. The year 1840 found Morse still in New York teaching art.

Two years later an unsuccessful demonstration proved a setback. He

laid a submarine line from Battery place in New York city to Governor's island. A skeptical crowd turned out just as on the occasion of Fulton's steamboat test. The test failed because a fishing boat had cut the line with its anchor, but the explanation was not believed and Morse was ridiculed.

In 1843 Congress finally acted favorably on Smith's bill by a narrow margin of 89 to 83 in the House; and favorable Senate action came so late before the closing of the session that Morse had returned to New York despondent. The good news was broken by Miss Annie Ellsworth, daughter of Morse's friend, the United States Commissioner of Patents. In gratitude, Morse promised that she should compose the first telegram.

EZRA CORNELL, who later founded Cornell University, devised a special plow for the underground line, which was obtained from Stephens & Thomas, Belleville, New Jersey. The wire was enclosed in a pipe and fed through the plow into the trench—a very efficient arrangement which the land wire communication industries today are beginning to come back to, in principle, to some extent.

However, at that early date the technique of insulation was not sufficently understood to make underground wire telegraphy practical—a discovery which Morse made when his line was only 9 miles outside of Baltimore. Thanks to some fast thinking by Cornell, the plow was broken, ostensibly by accident. This gave Morse a good excuse for shifting over to overhead construction, under circumstances which might otherwise have wrecked the project if the true facts had been known at the time.

Thanks to Louis McLane, president of the Baltimore & Ohio Railroad, Morse's right-of-way problem was solved, at a time when he thought it might gobble up his entire appropriation. Since that day, the telegraph industry has been closely associated with the railroad industry. The line was simply laid along the edge of the railroad right of way.

By May 1, 1844, the line had been completed as far as Annapolis, 22 miles from Washington. A successful test at this point was made possible when the news of the Whig convention in Baltimore was flashed to Washington (hours ahead of the returning delegates) by means of the Annapolis relay.

THE official opening of the line, however, came on May 24, 1844. An important crowd gathered in the small Supreme Court chamber, in-

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cluding Henry Clay and Dolly Madison, wife of the fourth President. Morse sat down at the key and tested it shortly before 8 A.M. A few minutes later Miss Ellsworth arrived with the first message which she had selected several days before from the Bible. At 8:45 A.M. Morse began tapping out the message.

Alfred Vail, in charge of the Baltimore end, received the message, exhibited it to newspapermen and others gathered there, and then sent it back to Washington where it was received with cheers. For some little while Morse and Vail continued to carry on telegraph conversation for the benefit of skeptics, exchanging comments about the weather and the news of the two cities. Mrs. Madison sent a message to a personal friend in Baltimore.

Such was the beginning of the telegraph industry. Several days later the line was opened to the public. But the public still considered it a plaything. Morse offered it to the government for $100,000. But the government declined, regarding it as a scientific toy which would never be self-supporting.

And so in default of public ownership, Morse, Cornell, and Congressman Smith turned to private enterprise, selling stock to finance expansion. By 1846 they had dug up enough money to build a line into New York city and began licensing groups to build lines in other cities.

The early Morse telegraph receivers actually recorded messages on paper tape in dots and dashes. In fact it was not until 1856 and later that operators learned they could receive messages by ear. In 1846, Royal E. House patented a printing telegraph system which would receive more than fifty words a minute in Roman letters instead of dots and dashes. This system was placed in use in the next five years on several important eastern lines.

In 1851, a Rochester, New York, group of men, headed by Judge Samuel L. Selden, and Hiram Sibley, formed a company known as the New York & Mississippi Valley Printing Telegraph Company, and bought the rights to extend the House system west of New York state. House was an original member of the board and all operations were to be by printing telegraphy. This company was formed for the express purpose of building a telegraph line from Buffalo, New York, to St. Louis, Missouri, but money ran low by the time the line reached Louisville and business began with only that amount of line.

By this time there were 50 companies operating short lines in various parts of the country. Messages were transferred from one line to another, or relayed through several systems. The consequent delay and expense were discouraging to the public, and by the time the New York & Mississippi Valley Printing Telegraph Company was operating, many short-line companies were losing money, and facing bankruptcy.

Selden and Sibley recognized this weakness of the infant industry and developed a plan for consolidating many of these small companies and establishing a national system with a uniform tariff and a uniform standard of service. The strongest opposition they had was from Ezra Cornell who controlled the Erie & Michigan Telegraph line running from Buffalo to

By-products of American Telegraphy

"BY-PRODUCTS *of American telegraphy are of tremendous importance. The inventive genius of Thomas A. Edison was first fired while Edison was a cub operator. Alexander Graham Bell received the inspiration for his telephone while experimenting with essential telegraph equipment. Marconi, using a standard Morse key, bridged the heavens with radio or 'wireless' telegraphy by sending a message across the English channel in 1899."*

Milwaukee, and having contracts giving it important connections with the East, West, and South. It was, therefore, with Cornell that they next proposed consolidation. This consolidation took place on April 4, 1856.

They began to buy a number of the dozen smaller lines in the Midwest, under a special enabling act passed by the New York state legislature. Cornell proposed that the name of the company be changed to the Western Union Telegraph Company, to indicate the union of the western lines into one system. Sibley soon became president of the company, which continued to acquire competing lines.

THE original Morse Telegraph Line between Washington and Baltimore, and later New York city, which was operated under the corporate name of the Magnetic Telegraph Company, was acquired by the American Telegraph Company in 1859. American became a part of Western Union in 1866.

Four years later, in 1870, California and the "Golden West" began to attract the telegraph pioneers. A number of short lines had sprung up along the coast, but there was no transcontinental communication save by stage coach and the Overland Mail. This was the year that the famous Pony Express and its 500 fast horses and 80 daring riders began creating thrilling material for fiction writers for generations to come. Buffalo Bill Cody, Wild Bill Hickok, Pony Bob Haslam, and others were carrying the mail over 1,400 wild miles of Indian country from St. Joseph, Mo., to Sacramento, Cal. When they didn't have to stop to fight Indians, or battle the elements, they made the one-way trip in eight days. They brought California closer to the Union.

Fired with the idea of building a transcontinental line, Sibley approached President Abraham Lincoln with the idea. Lincoln discouraged Sibley, saying that hostile Indians and the lack of poles on the treeless western plains would balk the builders.

But with the war between the states approaching, and the North in need of quick communication with the western states, which by this time were producing most of the gold and silver in the country (money needed by the North to fight the war), Congress passed a bill backing the project and Sibley began organizing for the biggest construction job of the telegraph industry up to that time.

THE transcontinental line followed the line of the old Pony Express. Jeptha H. Wade of Western Union went to California and consolidated a company to build the line east of Salt Lake City. Later Wade formed the Pacific Telegraph Company to build the line as far as Omaha. Eastern construction was supervised by Edward Creighton, western cattleman, who founded Creighton University at Omaha. Creighton made friends with the Indians which greatly facilitated the line building. Western Union continued its policy of buying small companies and by 1866 had acquired 340 of the same.

European progress in telegraphy was slow—most systems on the continent being government controlled. Perry M. Collins of Hyde Park, New York, in 1857 conceived the idea of a Canadian-Alaskan trans-Siberian line to connect the United States by land wire with European systems through Russia. Sibley of Western Union advanced Collins $5,000 and the Russian government agreed to build a 7,000-mile extension to connect with the American system. The venture was almost completed when Cyrus W. Field in 1866 laid his third and successful transatlantic cable which made the long overland line unnecessary.

However, the Alaskan work was not in vain. It was through the telegraph conferences with the Russian government, and the recommendations of Hiram Sibley, president of Western Union, to the United States government, that Alaska was purchased by the United States for $7,200,000. The telegraph was indirectly responsible for this. In surveying the route, engineers had stumbled upon the vast natural wealth of this country and had reported this to Sibley.

PART of the Alcan highway follows the old Telegraph Trail through Canada and into Alaska, and this old trail, itself, is still used by the Dominion government as its telegraph route into the Yukon. The success of Field's cables to Europe was a boost for the fast-growing telegraph industry generally. A Florida-Cuba cable was opened in 1867. Morse died in 1872 with telegraph an established fact. In 1882 Western Union went into the transatlantic business with two cables. John W. Mackay, western miner, joined with New York publisher James Gordon Bennett in 1884 to form the Mackay System (cables from France to New York, via England, Ireland, and Nova Scotia). These cables joined the Postal Telegraph Company bought by Mackay.

By 1902, Mackay had organized a group to lay a cable across the Pacific;

in 1903 his son exchanged the first round-the-world message with President Theodore Roosevelt. Both Western Union and Postal Telegraph grew apace until telephone and air-mail competition, combined with other circumstances, brought business clouds following World War I. By act of Congress, a merger of the two domestic companies was effected in 1943, with Western Union the surviving company.

By-products of American telegraphy are of tremendous importance. The inventive genius of Thomas A. Edison was first fired while Edison was a cub operator. Alexander Graham Bell received the inspiration for his telephone while experimenting with essential telegraph equipment. Marconi, using a standard Morse key, bridged the heavens with radio or "wireless" telegraphy by sending a message across the English channel in 1899.

IMPROVEMENTS since that time are almost too numerous to mention: the teletype (inaugurated in 1931 by American Telephone and Telegraph Company); carrier circuits which transmit hundreds of messages over a single pair of wires; switching systems to replace the manual relay; Telefax, the infant marvel by which entire newspapers and other facsimile reproductions can be sent; automatic relays and repeaters.

Engineers and scientists of the entire telegraph industry—wire and radio—have directed their thinking to the speeding up of war communications since 1941 and America's entrance into the second World War. Many of these developments, secret by reasons of security regulations, will serve the public in a new manner when the peace is won. Truly prophetic was the first simple message, "What Hath God Wrought?"

Postwar Utility Equipment

"DEVELOPMENTS *are to be expected in the electrical appliance field. Refrigerators have been promised which will not only be made of 'exciting' new materials (largely plastic), but will also be capable of greater temperature control and of meeting the requirements of the expanding frozen-food industry. Electric stoves will have new temperature controls and automatic devices. Work is said to be under way on a washing machine that will wash, rinse, and dry, all for the turning of a switch. An improved steam iron is on the way. Something may also be expected from the vacuum cleaner industry. But in the great majority of cases the first postwar models will be to all intents and purposes the same as the old; only as experimentation and retooling are completed, will new designs be offered."*

—FRANCIS WESTBROOK, JR.
Editor, Textile Age.

OUT OF THE MAIL BAG

Reactions on TVA Articles

It is not my purpose to reopen or extenuate the recent discussion about TVA contained in articles by myself and the TVA counsel, William C. Fitts, previously published in this magazine. I thought, however, FORTNIGHTLY readers might be interested to know about a few reactions to this exchange of viewpoints which have subsequently come to me. The persons I mention must, for obvious reasons, remain nameless.

One leading businessman in particular writes me as follows:

> "If the local electric system would pay taxes on the *improvements* which have been made since the purchase of the system from the Electric Power Company, they would have no surplus but the city would have sufficient revenue with which to operate properly and not have to place taxes on automobiles in order to provide sufficient revenue to take care of its actual operations."

The president of a great educational institution in the Tennessee valley writes:

> "Personally I have never been in favor of the TVA, because I believe that the whole thing looks toward socialism. I personally believe in private enterprise with reasonable governmental regulation. So far as the average citizen sees the operation of the TVA, it is succeeding. However, I realize that when you get back of the situation and see the vast amount of money the Federal government has poured into TVA, there is plenty of room for questioning the wisdom of the whole movement."

He also regrets the loss of assistance the private companies give to civic enterprise, one result of which is that his institution pays more for electricity than formerly.

The president of another great college within the area says that he had engineers, who had no gain or loss to consider, estimate the cost of——dam and they found electric power could have been produced more cheaply from a steam plant. He regrets the upheaval in the social life of people who had homes which had been in their families for one hundred years, and wonders where those people have gone. He says we hear a lot about the uplift and indeed the lakes furnish some good scenery, but lakes are not a profitable substitute for the fertile bottom land, nor hot-dog stands for historic homes.

Another man grows indignant over what he thinks is a deception in the way some retailers report their rates and revenues. In some cases they are allowed to add a surcharge. This is not included as a part of the revenue but is credited to "Consumers' Contributions for Debt Service." It appears this amounts to over $700,000 and as it is not reported as a revenue it is made to appear that the rate charged is lower than it actually is. In the case of 100 kilowatt hours for a residential customer the actual charge is $3.50 instead of $2.50 reported as revenue.

This same man calls attention to the fact that REA's annual report apparently shows great strides in Tennessee but this comes about because TVA turns over some villages to REA. Only 67 per cent of customers of coöperatives are actually rural. He encloses this farm data from the U. S. Census for 1940, for southeastern states:

	USA	*Tenn.*	*N. C.*	*S. C.*	*Ga.*
Per cent of farm houses within ¼ mile of line	46%	30%	45%	41%	41%
Per cent using electricity ..	30%	16%	24%	20%	20%

There is, of course, the reaction of the city of Lenoir, Tennessee, now involved in litigation with the TVA, because of what Mr. Fitts calls the violation of its contract with TVA by trying to fix its own retail rates so as to help out with the city's debt. This contract was dictated by TVA under a rather broad interpretation of congressional authority. It is noteworthy in passing that in my state of Oklahoma municipal plants quite regularly make contributions to their city general funds. The Grand River dam there tried the same retail policy as TVA and I know of two municipal plants within that area which declined to make such a contract and even added to their local plant capacity. Other cities, such as in the case of Lenoir, are not in a position to refuse be-

cause they have no place else to purchase.

I have also heard local criticism about the fact that TVA engineered its own tax bill (or payment "in lieu of taxes"), a feat which Mr. Fitts regards as quite creditable, but which to me is a confession that TVA was allowed to write its own tax bill. The intelligent taxpayer realizes that a mere agreement to return taxes lost at the time property is taken over by a public body—an agreement which provides for no taxes on new improvements and under which the tax actually declines from 10 per cent of revenues in 1940 to 5 per cent in 1948—is hardly a comparable tax burden.

TAXPAYERS cannot, of course, unravel the "net" which TVA is otherwise reported as turning into the Treasury—certainly not in terms of comparable and open tax amounts paid or which would be paid under similar conditions by a private corporation. There is also the suspicion that the vaunted rate saving by TVA can be explained in great part by the avoidance of proper taxes and because other folks pay interest and principal on $686,000,000 appropriated for TVA.

On this point there was the reaction of the West Virginia Chamber of Commerce (referred to in PUBLIC UTILITIES FORTNIGHTLY, December 23, 1943, pages 841-2) which reveals that TVA does not in fact turn in any money at all to the U. S. Treasury but merely conducts a paper account, while regarding any money it receives as its own, to be spent out of its "revolving fund" as it sees fit. Tennessee's Senator McKellar apparently had a similar reaction to these alleged "Treasury" deposits.

To all vain attempts to place TVA financing on a basis with private enterprise (which must necessarily omit such important items as interest and taxes equivalent to those business management must pay), there is The Twentieth Century Fund reaction contained in its release of February 7, 1944, which says, "There are, as in all public projects, difficulties in calculating costs and dangers in rate comparisons which fail to take account of advantages enjoyed by public projects but inaccessible to private enterprise."

—J. A. WHITLOW,
Vice president, Public Service Company of Oklahoma.

P. S. Incidentally, may I confess a couple of errors in my own text to which Mr. Fitts refers: (1) I did inadvertently quote indirectly while attributing direct quotation to a passage from a Supreme Court opinion—although no violence was done the meaning of the quoted words. (2) In referring to the cost of "Muscle Shoals steam plant," the text should have read "Muscle Shoals dam and steam plant"—again I believe the real sense was apparent.

—J. A. W.

Dams Turn River into Lakes

WITH the completion of the Kentucky dam, near Paducah, Kentucky, this spring, the Tennessee river will become a river only in name, says the National Geographic Society. Actually it will be a series of lakes created by the many dams of the Tennessee Valley Authority. Only the 23 miles between Kentucky dam and the Ohio river will remain a "river."

The headwaters of each lake lap at the base of the succeeding dam, forming a continuous 9-foot-deep navigation channel. Knoxville in Tennessee, far inland at the base of the highest mountains in eastern United States, 650 water miles from Paducah, and more than 1,650 miles from the mouth of the Mississippi, will become a sea outlet.

TVA is making over geography in the seven states of the Tennessee basin. There are nineteen dams on the Tennessee's tributaries and nine on the main stream. The twenty-ninth dam is located on a near-by branch of the Cumberland river. Highest dam of all is Fontana, with a reservoir on the little Tennessee river in western North Carolina. It is 460 feet high.

Kentucky dam, 8,650 feet in length, is the longest and highest of the dams on the main river. The "Great Lakes of the South," as TVA's twenty-nine reservoirs have been called, will total 1,107 square miles. Lake Ontario, smallest of the Great Lakes, is six and a half times larger.

Wire and Wireless Communication

THE radio world, never given to prolonged quiet, burst forth recently with as lively and complicated an argument as it ever had. The topic under debate was when and under what standards postwar television should make its bow. Writing in *The New York Times* (which itself became involved as the result of an editorial which drew criticism from Chairman Fly of the FCC), Jack Gould gave a play-by-play description of the back-of-the-scenes struggle going on to decide whether television's début will be made for public approval sooner or later. Shorn of as much engineering talk as possible, here is the list of principal contestants, together with a summary of their views:

The Columbia Broadcasting System—CBS started the current dispute by announcing that it favored a policy of concentrating all research effort on higher frequencies where there was sufficient room to telecast more detailed pictures than, the network claimed, were possible under present standards.

Paul W. Kesten, CBS executive vice president, contended that such a move was essential now lest a later shift to higher frequencies make receivers owned by the public suddenly useless or lest a large financial investment by public and manufacturers under present standards discourage ultimate improvement in the video art.

CBS, emphasizing that it was not seeking to delay television's advent, believes it the wiser course to prepare for scrapping what investment there is now under the present standards of television rather than risk a far larger sum in later years.

THE *Television Broadcasters Association*—The TBA, comprising set manufacturers and broadcasters, maintained that the CBS position was contrary to the engineering opinion of most of the industry. Allen B. DuMont, TBA president, speaking for himself and not the organization, said that it had not been proved technically that the higher-frequency television could be received with greater effectiveness at home. He noted that all the companies endorsing use of the present standards as the immediate postwar basis were engaged in manufacturing vital war equipment and were in a position to know of any sensational advances while CBS did not make sets.

James L. Fly, chairman of the Federal Communications Commission—Mr. Fly, perhaps the most important single individual in the dispute, endorsed with only minor reservations the policy of CBS. He said that it was unwise "to close the door at this point" on the establishment of standards. He described as "silly" an editorial in *The New York Times,* which supported video commercialization on the present basis, because, he said, the advantages of different frequencies had not been thoroughly explored.

Radio Technical Planning Board—This board, comprising most of the

country's privately employed engineers, perhaps has the most to contribute in the way of specific technical data but, so far, its chairman, Dr. W. R. G. Baker of General Electric, has maintained a policy of silence. The vice chairman, Dr. Alfred N. Goldsmith, speaking only for himself, has advanced a 3-point dissent from the views of CBS and Mr. Fly which, judging by report, reasonably represents the belief of many of his colleagues.

The points are: (1) Laboratories cannot now be diverted to the necessary research work in the higher frequencies and at the same time do maximum war work, Dr. Goldsmith remarking that "America comes before television"; (2) postwar employment is bound to suffer if the manufacture of equipment is delayed indefinitely while scientists seek perfection in the laboratories; (3) the present standards, when fully realized with the latest equipment, will satisfy a legitimate public demand for television and, in addition, are above the prewar standards in England, where, according to Dr. Goldsmith, television proved to have a "continuing entertainment value."

COMMISSIONER E. K. Jett, former chief engineer of the FCC and newest member of the board, is reported to have proposed a different or compromise policy—a sort of double standard. Commissioner Jett, it was stated, would have the television industry go ahead as soon as war restrictions are removed with an orderly introduction and distribution of presently acceptable receiving sets. At the same time, he would encourage further research and experimentation with the idea of eventual arrival at a relative degree of perfection. When that time arrives, the dislocations of the transitional period could be eased by temporary double-standard transmission of television programs and a definite plan for "trade ins" or rectification of outstanding receiving sets to aid the early purchasers to bridge the gap with the least amount of inconvenience or unnecessary financial investment.

This, it is generally observed, is what the regular radio broadcasting industry is preparing to do in the immediate postwar era in changing over from the present conventional AM (Amplitude Modulation) technique of broadcasting to the much improved FM (Frequency Modulation) technique.

The ramifications of the controversy run over into allied branches of the radio field, too. The adherents of Frequency Modulation broadcasting and some partisans of television are having a tiff over who is to get which wave length, the recommendations of subpanels of the RTPB already overlapping.

It is no secret that some radio station operators, fearing the necessarily large investments involved in television, would have no objection to seeing FM steal a march on the video art when peace comes. Some television enthusiasts are wont to dismiss FM as merely an improvement in sound transmission, whereas the addition of sight will be the real development of major import, they say.

* * * *

RUMORS continue to fly about anticipated changes in the personnel of the FCC. The term of Commissioner T. A. M. Craven, who has frequently dissented from a majority of the commission on broad policy questions, and who has never seen eye to eye with Chairman Fly on a number of controversial issues, will expire June 30th. It is reliably reported that Craven has notified President Roosevelt that he will not seek reappointment, but no formal statement about such a development has been made.

Rumors persist also to the effect that FCC Chairman James L. Fly, majority spokesman on the commission, might be called by the President to accept another position identified with government war operations, possibly as communications coördinator.

At the same time hope was fading fast for any substantial progress being made on pending legislation to reorganize the FCC and rewrite the Communications Act. Latest draft of the Wheeler-White bill (S 814) is understood to provide for a 5-man commission. But pressure of

other important matters in Congress and the disinclination to dispose of such controversial measures during an election year, in combination with the forthcoming letdown of congressional activity expected as the result of recesses for the political conventions and the summer schedule, are regarded by most political observers as factors making it exceedingly doubtful that the Wheeler-White bill would even be acted upon by either branch of Congress before election.

* * * *

JUSTICE Daniel W. O'Donoghue of the U. S. District Court on April 27th granted the Federal Communications Commission an injunction against twenty-seven Washington, D. C., hotels to stop them from assessing extra charges, over and above regular toll charges, for long-distance telephone calls.

The FCC suit, in addition to naming the hotels, also named as defendants the American Telephone and Telegraph Company and the Chesapeake & Potomac Telephone Company. Justice O'Donoghue, however, held the case open as to the telephone companies. An injunction, if issued against the phone companies, would prohibit them from providing telephone service for long-distance calls, it was pointed out.

The hotels insisted that the extra charges are for hotel service and not for the phone calls. In this connection, Justice O'Donoghue indicated that the hotels may make charges for service, but not in connection with the phone calls.

* * * *

CALLING for a free interchange of world news, Senator Burton K. Wheeler, Democrat of Montana, chairman, named a Senate Interstate Commerce subcommittee of five on May 4th to study international communications with a view to establishing an American policy before the war ends.

Designating himself as chairman, Senator Wheeler named Senators Wallace White of Maine, the acting Republican leader; Lister Hill, Democrat of Alabama; Ernest McFarland, Democrat of Arizona; and Warren Austin, Republican of Vermont, on the group, which he said would soon begin a series of conferences with government and industry experts preliminary to later public hearings.

Senator Wheeler said there had been "a great deal of talk" about the merger of international communication companies. Such a move, he added, might be "a partial answer" to the problem of breaking down discrimination in rates which he said now confronts American wire services and newspapers in channeling foreign news to this country. Senator Wheeler said:

> We have had some preliminary conversations with State Department officials and it is high time that this country establishes a program and procedures which will make our communications sovereign. I am in complete accord with the recent statements of Kent Cooper, executive director of the Associated Press, that freedom of world communications will go a long way toward eliminating misunderstanding and perhaps help prevent wars.
>
> There is ample evidence, both before the war and during it and wholly apart from the controls of censorship, that vital information has been suppressed or "buried" in foreign communication centers and that our newsmen have been unable to get their stories to their papers in this country.

He said he could not "look with equanimity on the situation in which the American press has found itself," having to pay several times the rate a word for foreign correspondence charged to foreign press associations and newspapers. A temporary correction has been worked out recently in the case of press to and from Australia, he said, "but even here a difference still exists in favor of (British) Empire press. There is no logic in the fact that American press associations or newspapers must pay more a word for a story filed to Australia, or from Australia, than does a Canadian or British press association, particularly when the story travels the same distance, and frequently over the same circuit."

He said that such a system did not lead to a free interchange of news and opinions, and that discrimination in rates on commercial messages "remains fantas-

tic." Senator Wheeler said that because the control of communications is a wartime security problem, the committee would seek the views of the armed forces on the kind of communications policy this country should have.

ANOTHER factor to be investigated, he said, involved the degree of foreign interest and ownership in some American communication companies, and concurrent American company interest in foreign enterprises.

"Some carriers in this country, I am informed, are even now planning 'deals' which would 'internationalize' some of our own communication lines in preparation for the postwar world," he said. "This may be an unwise policy."

Senator Wheeler said the amount of communications already owned and still being manufactured for the armed forces would be looked into, together with the question of its probable disposal at the end of the war.

* * * *

WHITE HOUSE influence in the granting of radio station operation permits by the Federal Communications Commission was denied vigorously last month by Paul A. Walker, FCC commissioner.

Walker told the House select committee investigating FCC "to my knowledge, no one from the White House ever communicates with commission members on specific operating grants."

Harry S. Barger, chief investigator for the committee and acting counsel, questioned the commissioner as to whether FCC had reversed itself for political reasons in the granting of a permit in 1936 for operation of a station in Watertown, New York. Barger exhibited four letters which he said were written by Watertown citizens to President Roosevelt, protesting the FCC's grant of a permit for the station to Black River Broadcasts, Inc., on the ground that its officials supposedly were hostile to administration water-power policies.

Following receipt of the letters, the attorney said, a new hearing on the case was ordered by the commission and the operating permit granted to a rival group, the Watertown Broadcasting Corporation.

Commissioner Walker told committee members he had seen the letters for the first time only two weeks before he appeared before the committee and did not believe they had been read by other commission members at the time the permit was granted.

* * * *

THE National War Labor Board on April 28th made public a report from Arthur S. Meyer, associate public member of the board, on the dispute between the Western Union Telegraph Company and the American Communications Association, CIO, over the terms of the contract covering former employees of the Postal Telegraph & Cable Company.

The board, on January 5, 1944, had directed the continuance of the contract pending determination of the collective bargaining agent or agents for these workers by the National Labor Relations Board. The Western Union and the ACA had agreed upon continuance of the contract for three months after the merger of the two companies on October 7, 1943, but the Western Union had objected to extension beyond the 3-month period. Subsequent to its order continuing the contract, the WLB appointed Mr. Meyer as its special representative to conduct hearings.

The application of seniority on the basis of the service record of employees, irrespective of their former company of employment, and the granting of jobs as nearly comparable to those held before the merger, are recommended by Mr. Meyer in his report to the board. He also recommended that the board direct that Western Union may reduce the weekly earnings of former Postal employees through a reduction of the work week subject to the provisions of the ACA contract.

The report recommended that an arbitrator be appointed by the WLB to decide disputes arising under the contract.

Financial News and Comment

By OWEN ELY

How Many Kilowatt Hours in 1947?

As indicated in chart (on page 700) from the *Edison Electric Institute Bulletin,* about two-thirds of all sales of electricity to industrial consumers are for war output, and only one-third for civilian enterprise. This has raised questions regarding the postwar trend of power output and revenues. As already mentioned in this department, W. M. Carpenter, institute economist, foresees a decline of about one-half in industrial power output by 1947 (as compared with 1943). This is presumably on the assumption that any postwar boom will prove rather short-lived. Mr. Carpenter states, "Except for the more obvious items of durable consumer goods, it is open to question that there really is any great deficiency of demand which cannot readily be filled during the tapering off of war production. The suggestion is advanced that the early postwar years will therefore approximate the character and tempo of the years 1936-38 as far as the private companies are concerned. As far as the Federal power plants are concerned, the question of overcapacity becomes, however, a more serious matter."

Leland Olds, chairman of the Federal Power Commission, has urged that the utilities should try to maintain a gross output of 200-220,000,000,000 kilowatt hours in the first postwar year (about the same as in 1943 and somewhat lower than the indicated 1944 rate) and set 270,000,000,000 kilowatt hours as a goal for the end of the fifth year after the war. (See page 637, May 11th issue.) While the latter estimate goes into the future about two years more than Mr. Carpenter's estimate (assuming in both cases that the war ends in 1944), the two forecasts seem diametrically opposed. Mr. Carpenter's sales estimate, adjusted to a basis of gross production, would be about 161,000,000,000 or some 40 per cent below Mr. Olds' figure.

Mr. Olds takes the typical Washington view — that if rates are adjusted downward this will automatically stimulate industrial use of electricity. This view seems fallacious because the cost of power is not an important factor influencing the level of industrial activity. The one business in which it is of considerable importance, aluminum production, is a typical war industry and will be deflated after the war, unless the metal can be sharply reduced in price to compete with steel, plastics, etc. The price of electricity has been declining almost without interruption for decades, yet sales of industrial power have followed closely the fluctuations of industrial production as measured by the Federal Reserve Board index. (See charts.) Of course, lower rates would be moderately beneficial to industry, but even if industrial rates were cut in half (they are currently about one-quarter of the average residential rate), this would mean a saving of only $400,000,000 a year as compared with the gross national production of about $192,000,000,000 *(Survey of Current Business* for April, page 7).

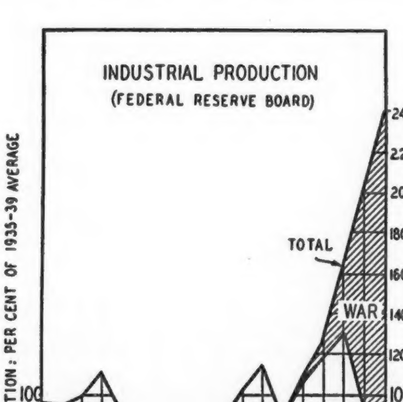
Chairman Olds' idea would be more correct if applied to sales to residential consumers, but such consumption comprises only about 17 per cent of total output so that it is difficult to envisage any increase in sales sufficient to offset the shrinkage in industrial use. Moreover, residential rate reductions are al-

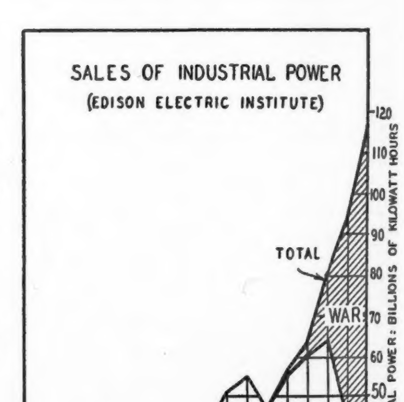
ready available where obtained by increased use of current, as provided in the sliding-scale rates offered by practically all utilities to their customers. It is almost axiomatic that where rates for a given company or section are below the national average, residential usage is correspondingly above average. Hence, the best way to reduce residential rates is to increase the use of household electric equipment, and if Washington agencies wish to stimulate the use of electricity after the war, they might consider subsidizing sale of such equipment.

Niagara Hudson Power

NIAGARA HUDSON POWER CORPORATION was incorporated in 1937 as a merger of Mohawk Hudson Power Corporation and Niagara Hudson Power (old company). The latter was incorporated in 1929 to acquire a majority interest in Buffalo, Niagara & Eastern Power Corporation, North Eastern Power Corporation, and Mohawk Hudson Power Corporation. Other interests were acquired in 1929-32, including 201,500 shares of Consolidated Edison and 445,738 shares of Central Hudson Gas & Electric Corporation (about a 30 per cent interest). Total system assets as of December 31, 1943, were $662,063,908.

The system has been required by the public service commission of New York to write down plant account to original cost. Considerable progress has already been made, and in February, 1944, Niagara Falls Power Company wrote down its account by $14,497,768. However, the commission or its employees have questioned other items aggregating some $32,000,000. Moreover, an expert employed by the commission has proposed that in order to place the depreciation reserve on a straight-line accrual basis, the system reserves should be increased by at least $65,000,000. The company





From the Edison Electric Institute Bulletin

	1943 Report Mill.	1943 Report Per Cent	1943 Adjusted Mill.	1943 Adjusted Per Cent	1942 Pro Forma Adj. Mill.	1942 Pro Forma Adj. Per Cent
Subsidiary companies						
Long-term debt	\$232	43%	\$232	53%	\$235	61%
Preferred stocks ...	127	23	127	29	....	..
Accrued div. on pfd. stocks	7	1	7	2	....	..
Parent company						
First preferred stock	38	7	38	9	96	25
Second preferred stock	11	2	11	3	....	..
Common stock	130	24	19	4	54	14
	\$545	100%	\$434	100%	\$385	100%

does not concede either claim, and the question of an increased reserve has been appealed to the courts. Assuming, however, that both adjustments were made, common stock equity would be reduced by some \$111,000,000. The accompanying table shows in round figures (millions of dollars) the system capitalization on three bases: (1) as of December 31, 1943; (2) same, adjusted for maximum write-offs and increased reserves; and (3) *pro forma* 1942 figures, giving effect to the changes proposed in the plan and also adjusted for write-offs, etc.

UNDER the proposed plan, arrears on all system preferred stocks would be paid off in cash, and new securities would also be distributed as follows: Buffalo, Niagara & Eastern Power and Central New York Power 5 per cent preferred stocks would receive one share each of the new 5 per cent preferred; New York Power & Light 7 per cent preferred, 1.15 shares—the 6 per cent preferred , 1.05 shares. Buffalo, Niagara & Eastern \$1.60 preferred would obtain one share of common. The common stocks of the three companies, substantially all held by Niagara Hudson, would receive fractional shares of new common stock. The distribution to Niagara Hudson's own stockholders would be somewhat more involved: The first preferred would obtain one-half share of the new preferred, one share of common, one share of Central Hudson Gas & Electric, one-half share of Consolidated Edison, and \$10.50 cash. The second preferred would receive 4½ shares of common, one-half share Central Hudson, and \$9 cash. The common stock would get one-fifth share of common and one-tenth share of Northern Development. (The latter company is to own various undeveloped properties.)

Based on the *pro forma* 1942 income account which accompanies the plan, and giving effect to the debt-refunding program for a number of system bond issues, new fixed charges would be earned 2.65 times, over-all coverage of preferred dividend requirements would be 1.64 times, and \$1.61 a share would be earned on the new common stock (without giving effect to the refunding program, \$1.53 a share).

Net income in 1943 (on a consolidated basis) showed a gain of \$348,000 over 1942, which would amount to 7 cents a share on the new common stock. Federal excess profits taxes were \$6,166,100, and if this tax is repealed after the war, with a 40 per cent rate (normal and surtax) substituted, the saving would amount to about 63 cents a share. Another possible gain would be \$800,000 or 16 cents a share if amendments No. 4 and No. 5 of Niagara Falls Power Company's license are modified (explained on page 5 of the 1943 report). On the other hand, under a 1943 law there may be an additional charge for water use by New York state. (See Note 4.) Moreover, \$1,308,000 (27 cents a

share) is reserved for amortization and is not available for dividends. Obviously, it is difficult to estimate with any exactitude the future share earnings, and changes in the plan may also prove necessary to "sweeten" the terms to holders of Buffalo, Niagara & Eastern $1.60 preferred. Certain large holders of the latter stock have appealed to the SEC for a separate recapitalization, and consideration is being given to the proposal. Another possible adverse factor is the long-continued efforts of the Federal administration to set up a huge hydro development on the St. Lawrence river, in connection with the seaway project.

WHILE it is possible to foresee earnings in the postwar period of around $1.50 to $2 a share on the new stock, it seems unsafe to capitalize these marketwise at more than 10 times, giving the stock a median estimated value around $17.50 a share. The new preferred stock might eventually be worth 105, it is conjectured. Using these figures and the current market values for Central Hudson Gas & Electric and Consolidated Edison, we arrive at the following estimated results:

	Approx. Market Price	*Estimated Future Value**
Buffalo, Niagara & Eastern $1.60 pfd.	16	20
Niagara Hudson Power 1st pfd.	78	108
Niagara Hudson Power 2nd pfd.	65	101
Niagara Hudson Power common	2⅝	3⅝**

* Including dividend arrears received in cash.

** Includes one-eighth point representing one-tenth share of Northern Development, with an assumed nominal valuation of 1¼.

It should be emphasized that any such potential values as are here estimated could probably not be realized for some time to come, owing to length of time required to clear up pending litigation, proceedings before the several commissions, possible modifications of the plan, and consummation of the refunding and merger program. In the meantime, however, dividends will continue to accrue on the preferred stocks, which perhaps gives these securities some appeal to wealthy investors.

Holding Company Common Stock Sales in 1943-4

DURING these dull stock market days, it may be of interest to review the common stock offerings representing sales of holding companies' interests (to conform to § 11) during 1943-4. The experience with these issues may be of interest in formulating policies with respect to other stock offerings, which are awaiting clarification of SEC rulings or more active markets. The six issues are listed in order of appearance.

Houston Lighting & Power: This common stock offering was handled as a negotiated deal, since Smith, Barney & Co. had previously organized a nation-wide group to aid National Power & Light in its efforts to obtain tenders of preferred stock in exchange for Houston Lighting common. The company had had a good record, having paid the regular $3.60 dividend for many years. The stock was offered at about 10.7 times the 1942 earnings, to yield 6.65 per cent. It was promptly listed and interest was stimulated by the increasing interim share earnings which, however, were partially due to tax adjustments.

The offering was favored by the facts that the territory is noted for its rapid growth, and that Texas utilities are not subject to state regulation. (A profit-sharing agreement is now in effect with the city of Houston.) There were no "complications" regarding plant account and no amortization requirements or special dividend restrictions, except such as might result from the profit-sharing agreement with the city. Original cost had not yet been determined, but the balance sheet was relatively "clean" of intangibles and write-ups. Capital structure was not too unfavorable; while bonded debt was nearly

60 per cent of total capital, the preferred stock issues were small and common equity was about 30 per cent. The stock is currently 10 points above the offering price.

Idaho Power Company: The common stock was sold by Electric Power & Light, which persuaded the SEC that, since the company was "relatively unknown," it should be handled as a negotiated deal. However, three groups of bankers competed informally for the deal, which was won by Blyth-Lazard Freres. The offering was favored by a convincing "story" regarding future growth possibilities; the company has large unused capacity, which it is thought can be taken up by increased irrigation in the postwar period; it is also rather heavily in the excess profits tax bracket. The hydro plants are practically immune to adverse effects of storms and droughts. The offering appeared successful. The stock was later listed and, as indicated in the table on page 703, is now selling about two points above the offering price.

Idaho was offered at about 10.8 times the stated earnings of $2.09, but at about 13.6 times the earnings of $1.81 after deduction of the new annual 28-cent plant amortization charge. However, it was expected that some of this reduction in earnings would be "recouped" by offsetting factors. It was stated that the company intended to pay dividends at the rate of $1.60 a share, making the yield 6½ per cent, about in line with the "going rate."

Public Service Company of Colorado was sold by Cities Service Company to the First Boston Corporation in a negotiated deal. The commission granted an exemption from competitive bidding because the stock had never been publicly held, and because the size of the transaction necessitated using an unusually large number of underwriters to effect nation-wide distribution. It was, however, marketed under very unfavorable conditions because of a "blast" issued by Judge Healy in his disapproving minority opinion.

Earnings were stated at $2.68, and an initial dividend was declared at the annual rate of $1.65, making the price-earnings ratio 9.3 and the yield 6.6 per cent. However, earnings were stated *before* an item of 57 cents for plant amortization. On the adjusted earnings basis, the price-earnings ratio would have been 11.8 times. The issue was marketed fairly successfully, considering the handicaps imposed by the week-end press publicity given to the critical views of Judge Healy. The stock is currently about a point under the offering price.

Central Vermont Public Service's offering went to competitive bidding, but the result was disappointing. A single bid was submitted by Harriman Ripley and First Boston Corporation for 195,000 shares, to be offered at 14¼ with a $1 "spread." The company rejected this and asked for approval of an amended proposal for a negotiated sale to a Coffin & Burr group, for retailing at $16 a share with a "spread" of $1.08, and the commission readily agreed. The statistical setup was "sweetened" somewhat, so as to make the offering appear more attractive. On the original basis the stock would have been sold at about 9.7 times earnings to yield about 7 per cent. A dividend restriction had been imposed, however, the company being required to retain 50 per cent of any excess over $1 of net income available for common. On this basis, earnings actually available for dividends would have been reduced from $1.48 to $1.24, and on this basis the price-earnings ratio would have been 11.5.

Under the revised setup, 178,000 shares instead of 195,000 were sold for the company's own account and 16,295 shares were sold for the account of New England Public Service (parent company), which agreed to donate the proceeds to Central Vermont in order to increase the preferred stock equity to the minimum liquidating value, so that the common stock dividend restriction originally proposed could be removed. Share earnings for 1943 were increased from $1.48 to $1.53, and the proposed dividend

rate from $1 to $1.08. The revised price-earnings ratio was 10.4 and yield 6.8 per cent. The issue did not prove too successful, being currently about a point under the offering price.

DERBY GAS & ELECTRIC was a "difficult" offering. The minority stock had been quoted over-counter around 20-21 a few weeks before the offering of Ogden's stock. The sale had been contemplated for some time, but the Street had displayed little interest, due to the small size and unfavorable background. When the SEC required competitive bidding, Allen & Company was apparently the sole bidder. However, the retail price was fixed about three points below the recently prevailing market. The spread permitted by the commission (2½ points) was also unusually generous, amounting to over 16 per cent of the net price as compared with 4 per cent for Houston and about 6½ per cent for Idaho and Public Service of Colorado. Because of the "realistic" price and the selling inducement, the issue was quickly marketed and now sells at a slight premium.

Derby was somewhat handicapped by a last-minute rate cut by the local commission. Per-share earnings were not very clearly set forth in the prospectus; nine months' earnings, after adjusting for a refund to electric customers, amounted to $1.86 and for the calendar year 1942 were $2.57. These were consolidated rather than parent company earnings. ("Corporation only" figures were smaller.) There were also certain dividend restrictions.

CENTRAL ILLINOIS ELECTRIC & GAS (sold by Consolidated Electric & Gas) was originally planned as a negotiated deal with Central Republic Corporation of Chicago, but the commission required competitive bidding and the deal then went to Allen & Company. Stated earnings were $1.92 a share, making the price-earnings ratio almost exactly 10. It was stated that the company's intention was to establish dividends at the rate of $1.30, making the prospective yield 6.8 per cent. Earnings were before dividend restrictions of a rather complicated nature (described in the prospectus). Maintenance and retirements allowances were only about 13 per cent, whereas the indenture would have required about 16.6 per cent for 1943 except for the fact that accruals in previous years were larger than necessary. With the 16.6 per cent ratio, earnings would have been reduced to about $1.77, making the price-earnings ratio 10.8. The company felt justified in setting up a smaller retirements charge, on the ground that revenues were abnormally high. The offering was apparently "slow" and the stock is now about 1⅝ under the offering price.

UTILITY COMMON STOCK OFFERINGS IN 1943-4

	Approx. Date of Offering	*Offering Price*	*Net to Company*	*Total Spread*	*Recent Price*	*(000) No. of Shares*	*Syndicate Head*
Houston Lighting & Power Co.	5/12/43	54	$51.85	$2.15	64#	243	Smith Barney
Idaho Power Co.	9/ 1/43	24⅝	23.02½*	1.60	26¾#	450	Blyth & Co.
Public Service Co. of Colorado	11/23/43	25	23.37½	1.62½	24	875	First Boston
Central Vermont P. S. Corp.	12/22/43	16	14.92	1.08	15	195	Coffin & Burr
Derby Gas & Elec. Corp.	1/ 5/44	18	15.50	2.50	18½	92	Allen & Co.
Central Ill. Elec. & Gas Co.	2/16/44	19⅛	17.63	1.49½**	17½	400	Allen & Co.

* Exclusive of about 17 cents expenses, payable by Electric Power & Light.

** The holding company also indemnified the principal underwriter against certain types of civil liabilities.

Listed on NYSE.

What Others Think

TVA—Experiment in Federalized Decentralization

If one would close his eyes and shut his ears to the current controversy over whether the Tennessee Valley Authority ought to be subject to closer purse-string control by Congress, or pay more taxes, or stop lobbying in the state legislatures and leave the Tennessee valley cities alone to do what they want to about their municipal revenues, one could preserve a calmer atmosphere to judge the long-range merits of TVA which have been ably summed up in the recent volume written by its director, David E. Lilienthal. "TVA—Democracy on the March" is really a forceful presentation by Mr. Lilienthal of the case for Federal decentralization in planning and government controls over original economy.

It is a pretty problem at best and Mr. Lilienthal realistically refuses to oversimplify it. There is much to be said, for example, about the obvious inability of a local county or state, or groups of the same, as well as private companies, to make suitable plans for the exploitation of an entire river basin such as the Tennessee valley, with a proper regard for the broad public interest.

On the other hand, the introduction of Federal control obviously intrudes the problem of avoiding absentee bureaucracy, which in many ways can be more galling and oppressive than the old absentee financial management, about which the reformers used to complain and still do. The absentee financial octopus lives in Wall Street and is pretty well done for. But the absentee bureaucratic octopus lives in Washington and from last reports was doing splendidly for himself.

The problem then is one of compromise between the national powers of the Federal government and the need for preserving some degree of local or regional autonomy. Can such a compromise ever be accomplished under the Federal banner? Mr. Lilienthal thinks it can, and in his book he sums up the Tennessee valley experiment as proving three essential facts which we could well afford as a nation to employ elsewhere:

> First, that development of a river demands one agency and one plan big enough to do all that needs to be done.
>
> Second, that within the broad framework of action which Congress designs, the decisions to be made are engineering decisions, and should be entrusted to engineers.
>
> Third, that the job must be run by men in shirt sleeves on the spot, not attempted as a remote-control operation by men in white collars in Washington.

So far there seems to be a pretty general impression that TVA has done a good job of keeping out of the more venal politics and keeping its eyes firmly fixed on the needs and welfare of the people of the Tennessee valley. The recent flare-up of the McKellar-Lilienthal feud might raise some question as to whether it will always be so. If in future years TVA should fall the victim of a Federal patronage machine, whether operated from Washington or elsewhere, it would do considerable violence to Mr. Lilienthal's ideals. If in future years TVA became a political instrument for by-passing or sterilizing local government power under a façade of "home rule" with opposite effect in fact, it would likewise fail to live up to its excellent promise.

In short, TVA on the balance has done pretty well so far and Mr. Lilienthal

writes with pardonable pride in its accomplishment. But it is still an experiment and subject to cynical observation that a new broom sweeps clean. There may not always be a Lilienthal, or men who sincerely think like Lilienthal, doing business for the TVA. But, on the other hand, it may also be that the precedents set for them in "TVA—Democracy on the March" are sufficiently strong to carry on year in and year out under the Republican or Democratic administration alike, in peace or war, good times or bad.

—F. X. W.

TVA — DEMOCRACY ON THE MARCH. By David E. Lilienthal. Harper & Brothers. New York, N. Y. Price $2.50. 248 pp.

House Slashes Interior Appropriation

ELECTRIC power and military deferment policies of the Department of Interior came in for sharp denunciation, as the House passed the Interior Department Appropriation Bill for the fiscal year 1945-46, beginning July 1st. The bill, as passed by the House on April 27th, provides for total appropriation of $87,672,580, compared with budget estimates of $96,824,207 for 1945-46, or a slash of $9,151,627. The appropriation also is $26,279,496 under the 1944-45 appropriation.

The largest reduction under budget estimates was $5,342,000 for the Bureau of Reclamation. The bureau had requested $19,125,200 and received $13,783,200.

Chairman Jed Johnson (Democrat of Oklahoma) of the Appropriations subcommittee which conducted hearings on the bill, told the House of the military deferment record of the Interior Department, and the House then passed an amendment by Representative James W. Mott (Republican of Oregon), which provided that "no part of the money appropriated in this act shall be used to pay the salary of any male person between the ages of eighteen and thirty years who is physically and mentally qualified for military service," and who has been deferred for reasons other than dependency or as necessary to war production.

In its report the committee said:

The committee is of the opinion that the department has been too liberal in requesting deferment of draft-age personnel. Statistics set forth on pages 8-11, part 1, of the hearings, show that as of February 15, 1944, there were 6,696 male employees eighteen to thirty-seven years of age holding positions in the department, that of this number 2,221 had received occupational deferments, and that of this latter figure 2,073 were deferred at the specific request of the department. The committee is disappointed in the showing made by the department in this connection and is of the opinion that such persons now holding white collar jobs could in a great majority of cases be replaced without detriment to the war effort. With the growing shortage of man power throughout the United States and the drafting of many pre-Pearl Harbor fathers in every community in the land, it is deeply to be regretted that so many deferments have been requested for some single men as well as married men with no children holding positions in the department which the committee considers not to be essential. The committee has endeavored to impress upon the heads of bureaus that this situation must be eliminated without undue delay.

CHAIRMAN Johnson said that as a result of the position taken by the committee at the hearing, the department already had taken steps to cancel requests for deferments, but that apparently this did not satisfy the House, which decided that the Mott amendment was necessary. Chairman Johnson said that figures submitted to the committee during hearings on the bill showed that actual revenues, excluding trust funds, for the fiscal year 1943 amounted to $51,655,000. The estimated revenues for the fiscal year 1944 were $60,090,000, and the estimates for the fiscal year 1945, $60,642,000. If the trust funds are in-

cluded, total revenues for the department for the next fiscal year will approach $80,000,000, Johnson said, pointing out that the primary reason for the tremendous increase over previous years was due to the development of great power and reclamation projects in the far West. Revenues from the sale of power by the Bonneville Power Administration, including Bonneville and Grand Coulee dams, were placed at $24,826,900.

Commenting upon the slash in the funds for the Bureau of Reclamation, Johnson said:

> The committee is of the opinion that the attention of the Interior Department should be called to the fact that the primary purpose of the Reclamation Law and the establishment of the Bureau of Reclamation is and always has been the construction of reclamation projects, with hydroelectric power a secondary and incidental consideration. Although the department may have strayed from this policy in some instances in recent years, I personally feel that under the able leadership of Commissioner Bashore, the Reclamation service is now and will continue to play an important part in winning the war, by assisting in producing the food essential to feeding our gallant men on the many far-flung fronts of the earth.

He pointed out that in addition to the nearly $14,000,000 provided for the Reclamation Bureau for maintenance, continuation of construction, investigations, and other expenses, there are unobligated balances of $42,000,000 available for continuation of construction as stop-work orders are lifted by the War Production Board.

BEN F. JENSEN (Republican of Iowa), member of the subcommittee, called attention to the fact that with an estimated revenue of more than $66,000,000 for 1945 the taxpayers of the nation would be called upon to pay some $21,000,000 to maintain the Interior Department. Mr. Jensen continued:

> . . . It has been my contention that if the Department of the Interior were run as economically as it should be and if the government would receive the proper compensation for the power which is generated by the power plants owned by the government, the Department of the Interior could be made a great deal more self-supporting. As one member of the Committee on Appropriations in charge of appropriations for the Department of the Interior, I am going to try to see to it that people in one section of the nation are not charged for part of the power used in other sections of the country where government power is made available below cost. We should charge enough for this power so as to be fair to private enterprise and, further, so that the price charged will produce such revenue as the government should receive from these power projects. At least, I am sure I am one of the members of the subcommittee who is going to insist that the rate on power is placed where it should be.

He said that in relation to all the power projects which the government owns, the Boulder Dam project is the ideal setup. He added that there is no controversy between those who use the power and the farmers who receive the water from Boulder dam, and expressed the hope that every government project will finally be placed under the same kind of rules, regulations, and administration as Boulder dam which, he declared, was operating very successfully.

ONE section of the committee report referring to activities of the Reclamation Bureau was inserted in the record by Jerry Voorhis (Democrat of California). It follows:

> *Payments in lieu of taxes.*—Another fundamental question on which the committee wishes to express an opinion is that having to do with the sale of power developed in connection with reclamation projects and distributed into a competitive market. The committee believes that under present conditions this practice is unsound and unfair, and that the construction of transmission lines, substations, and so forth, results in taking much valuable property off the tax rolls to the detriment of the tax structure of many communities. It is the consensus of the committee that in establishing power rates for the sale of project power, the department and other Federal agencies concerned should take these factors into consideration and that the additional sums received through increased rates should be applied to payments in lieu of taxes where justified, and in reimbursing the government for the construction costs of the power and irrigation features of such projects. In support of its recommendation the committee calls attention to power operations of the Tennessee Valley Authority, which, it is estimated, will

"DON'T PASS THROUGH THERE NOW, MABEL; THAT WISE GUY HAS GOT AN X-RAY FLASHLIGHT"

pay to states and counties in lieu of taxes, during the fiscal year 1944, the sum of $2,155,000. The committee recommends that a similar policy should apply to Federal reclamation projects and that such legislation as may be necessary to put the program into effect should be enacted.

Mr. Voorhis specifically attacked the suggestion that rates should be increased and said:

It is not true that every community in America, because some public utility has heretofore served it at possibly high rates, has to be doomed to continue to pay those high rates forever and a day, even though money is expended on a public power development which might make possible a reduction of those rates. To say that is to attempt to stop dead the hope of our people for a progressively higher standard of living and lower costs of agricultural and other production. . . .

Revenues should of course be used where possible for payment in lieu of taxes. They should of course be used for retiring the cost of construction. But the right way to increase revenues is not by increasing rates so as not to compete with the rate structure of private utilities. On the contrary the way to increase revenues is to reduce rates where economically feasible and to induce greatly increased volume of consumption, and a little bit later on this very report refers to the Tennessee Valley Authority and points out that the TVA is going to pay $2,155,000 in lieu of taxes to states and counties in that area.

DURING the hearings the subcommittee heard extended testimony on the part of Secretary of the Interior Ickes and Under Secretary Abe Fortas, seeking to justify construction of the transmission line from Shasta dam to

Oroville in the Central Valley project in California. The House in 1943 specifically had denied funds for construction of the line by the government, indicating that it felt the line should be built by the Pacific Gas and Electric Company. The Senate sought unsuccessfully to get the House to recede from its position and finally accepted the refusal of the House to allow use of funds for the line. The House in 1941 had approved construction of the line, and the Interior Department went ahead and built it with unexpended balances.

Representative Alfred J. Elliott (Democrat of California) during the debate in the House said that when the Central Valley project in California was proposed the people of northern California were told that completion of the power project would enable them to enjoy considerable reductions in their power bills and that the power would not be sold to a private agency. He said now that $150,000,000 has been spent, the Central Valley project, which was intended to bring water to the parched lands of the San Joaquin valley with power to be secondary, has been changed into a power project "pure and simple." He said that "not one shovelful of dirt has been removed to provide the canals to bring the water to the farmers."

He criticized the secretary, first, for misrepresenting the purpose of the project, and, secondly, for contracting all of the power generated to the Pacific Gas and Electric Company until 1949.

W. F. Norrell (Democrat of Arkansas) pointed out that since development of the Central Valley Authority began, municipality after municipality has abandoned its power facilities in order to use public power "and thereby they have lost the revenue from those activities." He said the original purpose of the project was to irrigate the land and sell power to farmers and other land owners to help pay for the cost of water. "However, now they propose to sell the power for as little as possible in place of getting enough out of it to assist those water users in defraying the cost of irrigation." He urged that rates be established sufficiently high to reimburse county, district, and state taxes lost, in order to be fair with private enterprise.

"I am not willing to vote millions of dollars out of the Federal Treasury, if you please, gentlemen of the committee, in order that a great project should be constructed—one that challenges the imagination of human beings everywhere, one that brings water to the Central Valley Authority—and at the same time ruin the tax structures of your state and counties, cities, and school districts."

—C. A. E.

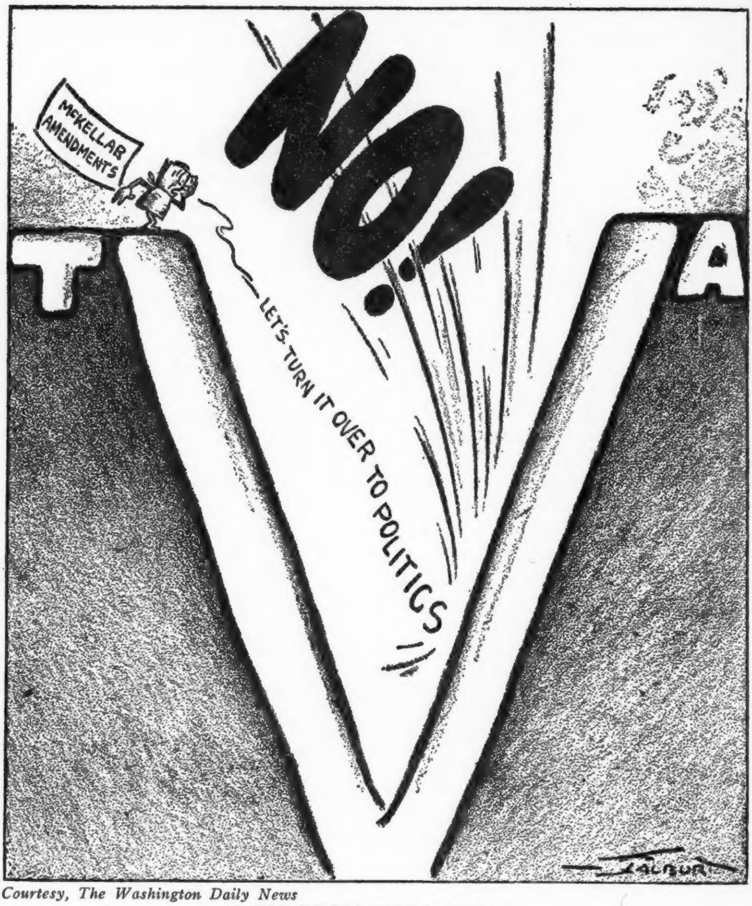
Is Full Employment Possible?

THE world being what it is, there are always going to be people who honestly expect, believe, and preach that the millenium is just around the corner, or think that it could be if such-and-such a happy set of circumstances were to come to pass.

Some of these people make their money by preaching in churches. Some of them go into politics and once in a great while even get into the White House. Still others go into business, make a wad of money, then become leaders in such groups as the Committee for Economic Development, the U. S. Chamber of Commerce, and the National Association of Manufacturers.

And, it appears from a study of the book, "Price Making in a Democracy," some of the millenialists study economics and become officials of endowed institutions. Dr. Edwin G. Nourse, the scholarly author of this volume, is vice president of The Brookings Institution and naturally falls into this class.

In "Price Making in a Democracy" he sets out to learn whether or not "full employment" (which means, we take it,



Courtesy, The Washington Daily News

ECHO FROM THE VALLEY

the situation existing today, May 1, 1944) can be attained and maintained in peace time under free private enterprise. After painstakingly weighing all the various factors, or most of them, and writing a lot of other more or less pertinent information, he decides that it *is* possible to have full employment, *i. e.*, war employment, during peace time under free private enterprise, but he doesn't sound too enthusiastic about it and, I think, not too convincing. He doesn't even make it seem probable, although he holds out hopes, as all preachers seem to do.

Dr. Nourse is to be congratulated on the time he spent on this volume. His diagnosis of some of the tenets of modern management are painstaking and helpful and thoroughly in the scholarly Brookings tradition. But there is a gap: The writer in no place comes face to face with the question: *How* is it going to be possible for free private enterprise to keep up full employment indefinitely without Federal deficit financing? Everybody knows that modern business

wants to do this. An amazingly large number of persons can tell us *why* this should be done and what are the results of Federal deficit financing, but nobody has yet told us *how* it could be done, since it has never been done except for short periods in our national history.

Before even these questions can be answered, another must be met: Who, besides a few collectivists who have been more than a little successful in getting their propaganda across, wants such full employment as we have today for the rest of time? Granted that we were at peace and still had the present employment, there are few who would want it continued indefinitely, considering the state of the nation from the standpoint of morals, crowded transportation facilities, employment of the aged, working wives, delinquent children, etc.

If today is the perfect employment condition for which economists and millenialists are seeking, this reviewer is willing to go on record against it—and vehemently. But perhaps I am cynical.

At any rate, if you want to feel that you are keeping up with the attitudes of the various economists who like to feel that they are keeping up with what's happening in modern industrial and business circles, you will enjoy reading this book.

Eric Johnston says the same thing, in effect, every time he makes a speech, and, evangelist that he is, does it more interestingly for those of us who are not too comfortable swallowing the Brookings style. Neither, however, can answer the basic question which, perhaps, time alone can answer: *How* keep full employment without Federal deficit financing?

—LARSTON D. FARRAR

PRICE MAKING IN A DEMOCRACY. By Edwin G. Nourse. Published by The Brookings Institution, Washington, D. C. Price $3.50. 540 pp.

Municipal Ownership Discussed in Britain

THE extent to which local government will exercise its option to take over privately owned electric utility companies in the postwar period is the subject of considerable discussion in Great Britain, stated B. Mittell, general manager of Electric & Musical Industries, Ltd., Hayes, Middlesex, England, in a news letter to Davis M. DeBard, vice president, Stone & Webster Service Corporation, New York. The letter is the ninetieth Mr. DeBard has received from England and was written in March of this year. Mr. Mittell said:

> The various sections of the electricity supply industry have just issued their respective recommendations as to what should happen after the war. You will remember the way in which our somewhat complicated situation arose. In the beginning, enterprising private companies and municipalities obtained powers from Parliament to lay mains and supply electricity in likely areas, mainly towns. Usually, in the case of companies, these franchises were given subject to an option to the local community to buy them up after so many years. Then the power companies came along and got authority to supply over large rural areas not covered by the existing "undertaking" and to supply in bulk to the latter. Later the national grid took over most of the actual generation and high-voltage transmission and "authorities" were set up here and there to merge adjacent distributing "undertakings."

Mr. Mittell pointed out that there are some 200 electric utilities (mainly in towns) still owned by private companies, and the option to purchase by the local governments is hanging over their heads. He continued:

> . . . Rather more than this number of local distribution "undertakings" are already owned by the municipalities. Both lots find themselves in sympathy in wanting to carry on and do their best undisturbed by being rushed into a scheme of nationalization. A fairly representative body of these two groups of undertakings, plus some of the power companies, have made a joint report advocating resistance to "change for the sake of change" and, as part of it, asking for the suspension of the right of compulsory purchase. This suggestion has evoked a counterblast from the London & Home Counties

Joint Electricity Authority, who no doubt base their hope of expansion upon the use of these compulsory powers. Two interesting figures emerge from the various reports: first, as to standardization. We have, as you know, gone most of the way towards standardization of 50-cycle frequency and 220 voltage but the figure is now given that on 1939 prices it will cost $103,200,000 to finish the job. The joint report which I mentioned advocates that the cost of this should be borne by the various undertakings and not by the industry as a whole. It suggests, though, that the industry should be helped in this by a government loan at a low rate of interest. Next, as to rural electricity development which also has some leeway to make up. It is said that $220,000,000 would be wanted for this and that the interest and refunding of this could be covered by an increase of one-fifth of a cent per kilowatt hour upon all existing domestic supplies throughout the country.

COMMENTING on the local and national outlook, Mr. Mittell declared it is unfortunate that in Great Britain even the local outlook has to be tied up so much with the national outlook and that, in turn, depends upon world trade. He pointed out that Great Britain was a free trade country until "the rage for nationalism and autarchy swept through one country after another and unsurmountable barriers to international trade were set up." Explaining that the whole country is about the size of New York state, he said this produces a strong tendency toward bureaucratic centralization in London. He added:

. . . This is not for our good because, small as we are, our area contains regions of marked individuality and distinct local resources and type of industry. I read the other day that "it is an inert democracy which merely supports or rejects government policies in whose formation it has taken no part." There has been an encouraging new technique on the part of some sections of the government—before introducing a bill to Parliament on afterwar topics they have explained that being a coalition government for war purposes only they intend to introduce a bill at some future date on such and such a topic and in the meantime would like to canvass opinions from all responsible bodies.

Mr. Mittell went into some detail in an attempt to explain the reasons for dissatisfaction among coal miners in South Wales. Explaining that at first the only difficulty was in getting the required supplies with so many miners called up for military service, he said now there is an outbreak of actual strikes and suggests that it may be because the miners have not been well handled in the face of the fact that their mines are old, not mechanized, deep, and very dirty. With working conditions as they are, he said, there is no rush of people desirous of working in the mines, which now employ mostly boys of eighteen and older men.

He concluded that some new methods, technical and administrative, will have to be found to make coal mining as attractive as other kinds of work and to make it efficient. The country depends upon coal, having very little water power and next to no oil.

Telephone Employees in the War

THE American Telephone and Telegraph Company has distributed the first issue of *Telephone War Digest* which, it explains in a foreword, "is not a summary of the war work of the telephone industry of the United States" but "is a story about people rather than about things."

The *Digest* tells the story of the part employees of the telephone industry are playing in the war effort—"at frames and at switchboards, in business and accounting offices, riding the heavy construction trucks, working with privates and generals, enduring the cold of the North and the heat of the Florida Everglades and the California desert."

The *Digest* opens with a story about the tremendous effort put forth by the employees as a result of the confusion on Pearl Harbor Day, December 7, 1941. It carries on from there to the months of intense activity to meet the needs of a growing war machine.

The March of Events

REA Extended Indefinitely

CONGRESS has extended indefinitely the statutory life of the Rural Electrification Administration and approved a downward revision of its loan interest rates. This was accomplished by Senate passage of the Pace bill (HR 4278) early this month, providing general authorization legislation for the Department of Agriculture.

The bill went into conference between the two houses to compromise on Senate amendments, but the provisions pertaining to REA are unaffected, having been approved by both houses.

The bill provides that REA may borrow funds from the Reconstruction Finance Corporation at a flat interest rate of $1\frac{3}{4}$ per cent and make loans to the REA local coöperatives at a flat 2 per cent, beginning June 30, 1945. Under the existing rates, REA paid $2\frac{1}{2}$ to 3 per cent and charged the coöperatives up to 3 per cent. REA hereafter will borrow directly from the RFC instead of through the Treasury, and the amounts it may borrow will be determined by Congress each year. This provision was placed in the bill, supporters said, because of the large backlog of REA projects which cannot be constructed at the present time, owing to war-time shortages of materials and equipment, but can be undertaken in large numbers to provide employment and extend rural electric advantages in the postwar period.

The bill would extend the life of REA by the simple expedient of eliminating the phrase which would have terminated its existence at the end of the fiscal year 1946. REA also is authorized to make loans for thirty-five years instead of twenty-five years, the purpose being to make possible rural line construction in more sparsely settled areas where a longer time would be required to repay the loans. Supporters pointed out that in the great majority of cases the 25-year period was adequate for coöperatives to make repayments.

Rivers and Harbors Bill

CLEAR-CUT authority to control irrigation in connection with navigation projects in a House-approved $400,000,000 postwar Rivers and Harbors Bill was requested early this month by the Interior Department. Declaring that the very existence of western America depends on irrigation, Commissioner Harry W. Bashore of the Interior's Bureau of Reclamation requested a Senate Commerce subcommittee to amend the bill to assure the authority. The amendment, prepared by Secretary Ickes, is intended to support efforts of western Congressmen to prevent broad development of navigation to the detriment of irrigation which they consider vital to the arid West.

Senator O'Mahoney, Democrat of Wyoming, and twenty-one associates have also introduced an amendment to the bill designed to permit states to determine for themselves the most beneficial use of rivers within their borders.

Under the amendment, the following congressional policy would be established:

1. To recognize the interest of the states in determining the development of the watersheds within their borders.
2. To preserve and protect established and potential use, for all purposes, of the nation's rivers.
3. To limit the authorization and construction of navigation works to those in which a substantial benefit to navigation will be realized therefrom and which can be operated consistently with the appropriate and economic use of the waters of such rivers by other users.

Specific congressional approval would be required for any navigation or flood-control works protested in writing by the governor of the state within which the project would be located.

Such projects would be subject to the coördination of all other plans for the use of waters affected.

Representative Fred Bradley and Senator Vandenberg of Michigan asked the subcommittee to include in the bill authorization for a new electric plant. Fearing that the government hydroelectric plant on the St. Marys river at Sault Ste. Marie might at any time fail, the two Michigan members of Congress sought authorization for a new $3,500,000 plant.

Bradley told the committee that "some legislation is necessary so the Army Engineers can extend the lease with the Michigan Northern Power Company which expires July 1st." He said that if the project were not authorized in the bill he would press separate legislation giving the Army authority to extend the lease. He and Vandenberg maintained, however, that the present plant "was in danger of failing momentarily."

SEC Orders Split

HOLDING that if the Cities Service Company "desires to retain its oil business, it cannot remain in the utility business," the Securities and Exchange Commission gave the big holding company a choice on May 5th of disposing of either its utility interests or its "vast and complex" oil enterprises and other nonutility units.

While the order directed Cities Service to limit its operations to the gas retail distribution business conducted by three utility companies in what is designated as the Mid-Continent group, the SEC, however, said:

"Our order does not foreclose retention in the Cities Service system of all of its oil business, all of its gas production and transmission business, and all of its other nonutility holdings, if Cities should choose to comply with § 11 (b)(1) (of the Holding Company Act) by disposing of its holdings in all utility companies. In designating Mid-Continent distribution properties as the single retainable system we do not require retention of this system. Cities may choose to dispose of its utility holdings and retain the rest of its system intact."

"The vast and complex oil business and the gas utility operations of the system have been found to be incompatible," the commission added.

The Cities Service holding system has more than $1,000,000,000 of assets and operates in every state and several foreign countries. Subsidiary companies engage in not only oil, electric, and gas businesses, but also in ice and water supply, steam heating, real estate, irrigation, transportation, ownership of patents, and various manufacturing enterprises.

The commission's opinion represented the last phase of the geographical integration proceedings against the Cities Service system, prior orders having dealt with the similar integration of the subholding company systems of the Cities Service Power & Light Company and the Federal Light & Traction Company.

Natural Gas Use Curtailment

CURTAILED use of natural gas by industries in the Appalachian region will be necessary this summer as producers seek to stock sufficient supplies to meet all requirements next winter, it was learned recently.

The War Production Board Office of War Utilities was expected to ask all commercial users in the Appalachian area to use as much stand-by fuel as possible during the summer months. If large users comply with the request, there will be no need for curtailment next winter such as there was last winter, is was said.

It is believed that the new line piping natural gas from Corpus Christi, Texas, to Cornwell, West Virginia, will be in operation some time this summer and bring in about 200,000,000 cubic feet of natural gas daily to be distributed throughout the area, which includes Ohio, Pennsylvania, West Virginia, western New York, the District of Columbia, and parts of Maryland.

Disney Drafts Bill

REPRESENTATIVE Disney, Democrat of Oklahoma, plans to introduce a bill in the House for "the exploration of every executive order, rule, or regulation at the end of every 2-year session of Congress to make a complete check of the executive department of our government."

Addressing the closing session of the Independent Petroleum Association of America at Bradford, Pennsylvania, on April 29th, he said: "By this system, the old and acceptable regulations will continue and the bad ones will die by failure of reënactment."

He also sought support for a measure he wants enacted whereby income tax will be limited by constitutional amendment to 25 per cent "in order that control of business be released." He added that reduction of tax rates will be an incentive to cut down the national debt.

New CPRB Members Appointed

WILLIAM L. BATT, vice chairman of the War Production Board for international supply, last month announced the appointment of Frederick M. Eaton, solicitor of WPB, as deputy member of the Combined Production and Resources Board. H. C. L. Miller, formerely associated with the Lend-Lease Administration, has been appointed U. S. executive officer of the board, and Allen Peyser, formerly director of the WPB Foreign Division, will become the executive director of the board.

Mr. Batt stated that this was in line with strengthening the staff of the board to meet the increasing load placed upon it in connection with relief and rehabilitation.

CIO Losing Ground

A RESURGENCE of the United Utility Workers Union of America—the "Triple U"—was predicted recently by leaders of the Independent Association of Employees of the Duquesne Light Company and associated companies. That belief was based on the recent defeat of the CIO, by a majority of 4,000, in an election affecting 9,500 production workers and 3,500 salaried employees of the Consolidated Edison Company in New York.

Duquesne leaders, who helped found the United Utility Workers Union, an association of independent unions in the electric power industry, at Cincinnati two years ago, believe the setback at Consolidated will check the swing

toward the CIO by present top leadership of the United Utility Workers.

The vote at Consolidated, which has the largest independent union in the utility field, was regarded as a test of that trend. The independent itself applied for the election so that the wish of its members, to join the CIO Utility Workers Organizing Committee or remain an independent affiliate of United Utility Workers, could be satisfied.

Clarifies Seizure

SEIZURE by authorities in the Tucuman Province of Argentina of a subsidiary of American & Foreign Power Company, Inc., was attributed recently to the "avowed policy" of a local public service board of taking over all private utilities, in a statement by Curtis E. Calder, president of the parent company.

Mr. Calder asserted that public lighting bills in the province had not been paid for thirteen years, that unreasonable regulations had been enforced, and local employees incarcerated and "held for weeks at a time."

The subsidiary, which had net revenues equal to $235,000 in 1943, expects to receive just treatment when the matter reaches high courts in Argentina, Mr. Calder said.

British Utility Rule

OUTRIGHT nationalization of Britain's fuel and power has been recommended again by the Labor party directorate in a report prepared for submission to the party's annual conference, it was disclosed recently.

Balanced utilization of resources was stated as the aim of the paper, which was said to take strong exception to what is termed the bad development of each service. It was acknowledged that the Ministry of Fuel and Power, established since the war began, was a long stride in the right direction, but only the first step.

Fifteen specific recommendations were made for postwar control of fuel and power. The most important follow:

1. A single ministry responsible for the general supervision of productive activities in coal, gas, electricity, by-products, etc.
2. A national coal and fuel corporation to own and supervise the administration of all the industries concerned.
3. A board working in the public interest and responsible for all business undertakings in the production, preparation, and marketing of coal.
4. A marketing board to sell at home and abroad and regulate prices and exports.
5. Regional board, pit councils, and committees to handle the problems of production, dismissal, welfare, canteens, etc.
6. The development and control of production in the gas and electricity industries to be under a special board appointed by the Ministry, and the supervision of private industrial or commercial generating plants designed to meet special needs.
7. Encouragement of the full utilization of coal by a new research organization.
8. A joint wage authority in each industry to deal with representatives of the board concerned and the workers. Failing agreement, there should be independent arbitration.

The coal industry, the most important in the country, receives the closest examination in the report. The document concludes that inasmuch as the coal in the ground is now owned by the nation, "it is equally important that the industry which renders the potential wealth of the coal seams available to mankind should also be brought under public ownership."

District of Columbia

Pentagon Bus Control Urged

CONTROL by the District of Columbia Public Utilities Commission over bus lines operating between Washington and the Pentagon building, as well as other federally owned properties in near-by Virginia, was urged by Senator Patrick McCarran, Democrat of Nevada, chairman of the Senate Judiciary Committee, on May 3rd.

The Senator was formerly the chairman of the Senate District Committee.

PEPCO Hearing Ends

THE protracted Potomac Electric Power Company rate case has ended, except for the filing of briefs to take place not later than May 31st. Final session was held on May 9th when the District of Columbia Public Utilities Commission excluded from the record the documents offered a week earlier by General Counsel Alan Johnstone of the Federal Works Agency, bearing on control of PEPCO by the North American Company. PUC Minority Member Gregory Hankin dissented.

In rejecting the file of papers, Commission Chairman James H. Flanagan characterized them as "incompetent, irrelevant, and immaterial."

Three Federal agencies have withdrawn court appeals from the commission's order reducing the company's rates $310,000 under the Washington plan. The agencies, which had asked a $2,000,000 reduction, were OPA, Treasury Procurement, and Federal Works Agency, the latter as large-scale consumers of the power company.

Indiana

SEC Approves Merger

THE merger of the Indiana Hydro-Electric Company into the Northern Indiana Public Service Company, lessee of its properties, was approved on May 7th by the Securities and Exchange Commission.

Two hydroelectric generating stations on the Tippecanoe river near Monticello, Indiana, and eighty-four miles of transmission lines compose the properties. The company's only income is the $380,000 yearly rental received from Northern Indiana.

Dissenting stockholders may apply to the Indiana Public Service Commission within sixty days after the SEC's approval of the plan to have the value of their stock assessed and determined. Northern may then pay the assessed value to the dissenting stockholders or abandon the merger.

Missouri

Hold Parley in Sale

J. WESLEY MCAFEE, president of Union Electric Company, held an informal conference at Jefferson City early this month with the state public service commission concerning elimination from the Union Electric rate-making base of any duplicate or parallel facilities to be acquired in its pending purchase of Laclede Power & Light Company, its only St. Louis competitor.

No agreement or decision was reached, it was said, as determination of the amount of property to be charged out of the rate base is before the Federal Power Commission in a pending case involving transfer to Union Electric of some of the Interstate property of Laclede Power & Light. The Laclede Power sale also is before the Securities and Exchange Commission in another case.

The base price in the purchase agreement is $8,600,000, and adjustments may increase it to about $10,000,000, it was said.

Sale Plan Studied

THE proposed sale of control of the Missouri Power & Light Company of Jefferson City to the Continental Gas & Electric Company of Chicago by North American Light & Power Company for $3,729,800 was taken under advisement by the state public service commission on May 5th after hearing testimony that there was no corporate affiliation between buyer and seller.

Frank L. Conrad of Chicago, president of United Light & Power Company, top holding company of Continental, denied that North American Light & Power, a North American Company subsidiary, was affiliated with United Light & Power or any of its subsidiaries, including Continental.

Nebraska

Electric Workers Strike

STRIKE of a reported 49 per cent of the union electric employees of the Consumers Public Power District and the hydros, effective May 4th, was general throughout the operating territory and caused statewide and even national concern. Possibility of Army action was hinted in a statement by Harold Kramer, general manager of the Loup River Public Power and Irrigation District, who said: "We are in close contact with the Army."

Should the partial strike extend long enough or be expanded, he said that the Army may step in to insure continuation of power to war plants.

No comment was available from Selective Service headquarters on the possibility that striking workers, currently deferred by reason of their occupation, now would be subject to call. Occupational deferments are granted providing the individual meets the following three requirements:

1. He is regularly engaged in war production or the war effort.
2. His loss would cause serious curtailment in the war effort.
3. He cannot be replaced.

Consumers and the hydros serve all the state's war plants and military installations except the Martin-Nebraska bomber plant at Omaha.

Charging that the Consumers Public Power District has built up a gigantic political machine in Nebraska, operating in 74 counties, C. W. Thams, chairman of the joint strike committee of six local unions, in a statement issued on May 4th, stated that the district had enough influence on the last state legislature to have the old ceiling on salaries of executive officers removed. He alleged that while they made the sky the limit for their own salaries, when their employees seek a fair wage, they are accused of being incited by the power trust. He said:

"The Consumers system involves 384 cities

and towns, and in most of these it has a monopoly. It has bondholders owning about $46,000,000 of outstanding obligations. Its officers and agents, who are politically and socially prominent, are active in practically all cities and towns within its broad operating territory. It maintains a lobby before the legislature. It now desires to exterminate the influence of organized labor as a further step toward a complete dictatorship in Nebraska politics. It practically controls the hydros because it has the customers and the hydros cannot operate without customers. The Consumers is now the power trust of Nebraska."

Thams declared that Consumers and the hydros are again calling to their aid their old reliable propaganda smoke screen by insinuating that the strike is being instigated by private power companies. This is the way, he added, that the power districts have answered their critics and "excused their misdeeds since birth."

The Associated Press reported from Kansas City that Paul Nachtman, chairman of the regional War Labor Board, said he wired Governor Griswold of Nebraska that the public power strike in that state does not come under WLB jurisdiction.

Union electric workers at the Columbus power house walked off the job on May 6th in accordance with union threats to carry out a complete "shutdown" in Nebraska's public power districts. The action came just as Governor Griswold was scheduled to commence a conference with power district representatives at Lincoln in an attempt to reach a settlement.

Consolidation Plan Rejected

A PROPOSAL to consolidate the entire Consumers Public Power District system to obtain better rates in financing was flatly rejected at Scottsbluff on April 24th at a meeting of members of the city council and twenty interested citizens.

"It is the consensus of this meeting that Scottsbluff is not in favor of consolidating that part of the western division of Consumers Public Power District west of Ogallala with any other part of the system," a motion adopted said. Mayor Earl I. Mead presided.

General Manager V. M. Johnson of Consumers, who attended the meeting, said "As far as I am concerned the question is settled, and I believe that the board will respect the opinion expressed here."

Johnson, accompanied by Clarence A. Davis of Lincoln, Consumers general counsel, said consolidation not only would obtain better rates in refinancing $43,000,000 in bonds but would also result in operating economies. In a resolution passed in March, 1942, Consumers pledged that revenue of the western division would be used to finance this division only, and Johnson assured the meeting the Consumers board will stand by that pledge if the consolidation is opposed in this division.

New York

Waterway Project Opposed

DEFEAT of legislation authorizing development of the St. Lawrence waterway project was urged upon Congress last month by the New York State Chamber of Commerce, which termed the proposed project a "subsidized transportation facility designed for the supposed benefit of one group of citizens at the expense of another."

A report of the chamber said "no scientific principles exist which can be used as a guide in allocating the expenditures on the seaway which are for water power. Furthermore, a situation would be created where the private electric power industry will not know for years what competition to expect from the St. Lawrence, and whether another Tennessee Valley Authority will be created. Also, the railway industry will be uncertain as to the effect the opening of the canal will have upon its business. The report added:

"It might even develop that the government will go into the operation of vessels on the St. Lawrence waterway when completed, as it has on the Mississippi river."

Ohio

Co-ops Get Utility

THREE rural coöperatives will purchase the Ohio-Midland Light & Power Company, Canal Winchester, Ohio, on a joint bond of $2,115,000, directors of the parent holding firm announced in New York city last month.

Purchasers are the South Central Rural Electric Coöperative, Inc., Lancaster; Union Rural Electric Coöperative, Inc., Marysville; and Inter-County Rural Electric Coöperative, Inc., Hillsboro. Approval of the purchase was said to be pending before the Securities and Exchange Commission.

Ohio-Midland, whose parent is the Associated Gas & Electric Company, has headquarters in Canal Winchester and serves about 8,000 customers in Fairfield, Ross, Pickaway, Frank-

lin, Hocking, Madison, and Union counties.

Gas Strike Ends

ARTIFICIAL gas service was restored to commercial consumers of the Ohio Fuel Gas Company on April 27th as the utility reported "probably 90 per cent" of its 160 service and production workers returned to their jobs, ending a 3-day work stoppage.

The workers, members of the United Gas, Coke, and Chemical Workers of America (CIO), voted to end their strike on April 26th. Union President John Noon said the men also voted to petition the regional War Labor Board for reconsideration of a decision denying a 5-cent hourly wage increase, and to withdraw a 30-day strike notice given the Labor Department on April 21st.

The stoppage curtailed manufactured gas deliveries to 81 commercial establishments, making an estimated 20,000 workers idle.

Oklahoma

Cities Get Rate Slash

THE state corporation commission would approve a schedule for reduced rates of the Oklahoma Gas & Electric Company to thirteen cities and one coöperative, Ray O. Weems, vice chairman, said recently.

It was estimated by the commission staff the savings to all would amount to $9,714 annually.

The cities affected include Cashion, Crescent, Dacoma, Edmond, Geary, Goltry, Manchester, Cleveland, Orlando, Pond Creek, Prague, Tecumseh, and Watonga. The Caddo Electric Coöperative, serving in Caddo county, also was included.

Oregon

Bonneville Denied Line

THE Bonneville Power Administration was recently denied the right to construct what would have been the first Bonneville-owned power line to enter the city of Portland.

The city granted a franchise for the line to Portland General Electric Company. The public and private power agencies had been vying for more than a year for the right to build the $250,000, 115,000-volt transmission line into the heart of industrial Portland.

Pennsylvania

Orders Appeal to Bar Fare Rise

MAYOR Bernard Samuel early this month moved to prevent a possible fare rise on subways and trolleys in Philadelphia. He ordered City Solicitor Frank F. Truscott to appeal to the state supreme court from a superior court decision of April 18th increasing the valuation and earnings limit of the Philadelphia Transportation Company.

That decision, upsetting an earlier state commission ruling, raised the PTC valuation from the commission's $77,000,000 figure to $93,000,000, and the allowable rate of return on that valuation from 6 to 6½ per cent.

Truscott began immediate preparation of the city's petition for the appeal. If necessary, Truscott said, the case might be taken up to the U. S. Supreme Court.

The fare controversy started nearly three years ago with an application by Philadelphia Transit to the commission to allow a fare boost from the present two tokens for 15 cents, or 8 cents straight, to three tokens for 25 cents, or 10 cents straight.

The state public utility commission subsequently moved to forestall a possible future fare rise. At an executive session in Harrisburg, the commission directed its law bureau to appeal to the state supreme court.

Tennessee

Towns Study Power

A PROPOSAL that five upper east Tennessee cities purchase all the properties of East Tennessee Light & Power Company and then operate their own electric systems was being urged on officials of the five municipalities, it was learned recently.

Under the plan, advanced by a Nashville investment concern, the cities would act in concert in acquisition of the properties. To that end, each would designate a representative to act for it in a future intercity meeting to determine procedure.

The purchase presumably would be independent of the Tennessee Valley Authority, with which all five cities—Bristol, Johnson City, Greeneville, Erwin, and Elizabethton—have negotiated, in varying degrees, over a long period.

For that reason, Erwin has already rejected the proposal, the board of aldermen having decided, according to a spokesman, "that we should make no commitments that might interfere in any way with our negotiations with TVA."

Greeneville's governing body has taken affirmative action, and T. D. Brabson, prominent banker, was designated to act for Greeneville in any intercity meeting that may be arranged.

A representative of the investment company brought the matter to the attention of the Johnson City commissioners, who have taken no action.

Bristol, Virginia, and Bristol, Tennessee, have contracts with TVA committing them to make efforts over a period of five years to acquire systems for distribution of TVA power.

Utah

Transit Franchise Granted

SALT LAKE CITY commissioners gave official approval last month to transfer of the Utah Light & Traction Company franchise to Salt Lake City Lines when they adopted an ordinance giving the new company rights to operate in the city until July 1, 1955.

The new agreement will increase the city's revenue about 40 per cent over its 1943 receipts from the traction company tax. The company will pay the city one-half of one per cent of its annual gross passenger revenue, with a minimum fee of $5,000 and a maximum of $15,000 a year.

The franchise provides for continued free transportation of city policemen and firemen in uniform.

The ordinance would become effective at 3 A. M. the day following written acceptance by Salt Lake City Lines and upon written notice filed concurrently with acceptance that the transfer of transportation properties has been effected.

Under the old franchise, revenue to the city was based on the daily average number of busses or streetcars in operation during the year. Slightly less than $3,000 was received last year as license tax, Salt Lake City officials said.

Postwar Power Plans

STATEWIDE representatives of the Utah War Emergency Power Association were told recently that a mandatory electricity conservation program is not probable; that large amounts of surplus power will be available after the war; and that amazing refinements and innovations of electrical appliances are in store for the postwar period.

J. A. Hale of Salt Lake City, vice president of the Utah Power & Light Company, pointed out there has been no shortage of electricity in the area and called attention to the addition of 100,000 kilowatts of capacity with completion of the steam-electric generating plants at the Geneva steel works and at the Utah Copper Company mill. Both are interconnected into the vast Northwest power pool which extends from southern Utah into Oregon and Washington.

Paul P. Ashworth of Richfield, general manager of the Telluride Power Company, described the recent interconnection of two municipal systems with the Telluride system and in turn the huge Northwest power pool.

Wisconsin

Sells Transport Lines

THE Wisconsin Power & Light Company is disposing of all its transportation business, both local and intercity, President Grover C. Neff, Madison, announced recently.

He said Northland Greyhound lines was acquiring the intercity business, a motor coach line from Dubuque, Iowa, to Green Bay via Madison and from Fond du Lac to Sheboygan.

The city bus operation in Fond du Lac and Sheboygan, and the suburban operations between Sheboygan, Kohler, and Sheboygan Falls, have been sold to Green Bay Stages, Inc., Neff said, and the city bus operations at Janesville and Beloit have been sold to A. P. Gale, Madison, who resigned last month as executive vice president of the Power & Light Company.

In each case, Mr. Neff said, the new owners would employ all the present operating personnel.

Actual transfer of the properties would not take place until the state public service commission and the Interstate Commerce Commission have approved the transactions.

The Latest Utility Rulings

Fair Value Is Basis for Rate Making In North Dakota

THE supreme court of North Dakota has refused to modify its previous construction of North Dakota statutes fixing the basis for rates, although, as stated by the court, there can be no doubt today but that in so far as the Federal courts are concerned the "ghost of Smyth *v.* Ames had been laid" in Federal Power Commission *v.* Natural Gas Pipeline Co. (1942) 315 US 575, 86 L ed 1037, 42 PUR(NS) 129, 62 S Ct 736, and Federal Power Commission *v.* Hope Nat. Gas Co. (1944) 320 US 591, 51 PUR(NS) 193, 64 S Ct 281. The court declared that it was concerned with the law of the state, and it had held that the fair value formula as set forth in Smyth *v.* Ames and as modified by subsequent decisions of the Supreme Court of the United States had been adopted by the legislature as the formula for determining rate bases for public utilities.

Judge Christianson, concurring specially, quoted a statutory provision that the value of the property shall be such sum as represents "the money honestly and prudently invested in the property." The majority of the court, however, had ruled that fair value is the basis and, accepting the decision of the court as promulgated by the majority, he was constrained to agree with the conclusion reached on the whole case.

The weight to be given to historical cost, reproduction cost, and other classes of evidence in a consideration of the value, the court held, is to be determined in the light of the facts of the case. Fair value must include the increase in value over original cost, and the commission may not disregard evidence of reproduction cost. Where the commission gave equal weight to reproduction cost and historical cost, it did give weight to reproduction cost as a major factor.

The court also held, on the question of value, that the commission may depreciate historical cost before giving it consideration where the utility has made a practice of charging annual depreciation; that the value which must be ascertained is the reasonable value of property used or useful at the time it is being used; that the allowance for interest during construction is sufficient compensation until new facilities are used for the public service; that a statutory provision that no order for valuation or revaluation shall be made more than once in three years does not prohibit the commission from including in its final order separate rate bases for the year the investigation was in progress; and that general price trends and not intermediate or abnormal price fluctuations must be considered.

The commission, the court ruled, must base its decisions upon evidence disclosed and incorporated in the record. Amendment of the commission's order directing that the rate of return originally fixed at 6 per cent be reduced to 5.5 per cent was set aside where it appeared that the commission's finding rested upon evidence which was not in the record. Similarly a reduction in depreciation allowance from 4 per cent to 3.5 per cent was set aside. The commission had correctly stated the rule as to return based on present money markets, risk, and other factors. The court found no evidence, however, as to the present money markets, yields on corporate and government bonds, prevailing rate of interest, and comparable rate of return in the same locality.

An objection that the commission had no power to propose and initiate specific rates, but only power to veto proposals by the company, was overruled. *Northern States Power Co. v. Public Service Commission et al.*

Interest Allowance on Depreciation Reserve

THE Missouri commission, in a proceeding relating to rates of the Springfield Gas & Electric Company, required that the company calculate interest on the monthly balances in its depreciation reserve account at the rate of 5.5 per cent per annum. The amounts so arrived at are to be credited monthly to the Depreciation Reserve accounts as income thereon and charged to Income Deductions. Annual charges to operating expenses for depreciation are to be reduced by the same amounts.

A Missouri statute provides for commission jurisdiction over the depreciation reserve account and for the fixing of the annual rate for accruals thereto. The statute provides that "the income from investments of moneys in such fund shall likewise be carried in such fund."

The company's depreciation reserves were invested in the company's property, and by virtue of that fact the company was deriving a return of 6½ per cent or more upon this investment. The commission recognized that the company was entitled to some compensation for the handling and investment of these funds and was of the opinion that, in view of all the circumstances in the particular case, an allowance of one per cent annually for such handling and investment was ample.

This ruling was made in a supplemental report and order following the commission's previous order of March 9, 1944. This later report and order approved a company proposal that instead of filing new rate schedules reflecting reductions on or before April 15, 1944, a reduction for that year be made by refunding to customers that portion of the amount which pertains to bills already rendered and by allowing credits on all bills for the remainder of the year until the amount of a contemplated reduction shall have been refunded. *Public Service Commission v. Springfield Gas & Electric Co. (Case No. 9067).*

Power Company Acquisition Held Subject To FPC Jurisdiction

AN application by Virginia Electric & Power Company and Virginia Public Service Company seeking an order under §203 of the Federal Power Act authorizing a merger of facilities, or, in the alternative, an order dismissing the application for lack of jurisdiction, resulted in a determination by the Federal Power Commission that it had jurisdiction. The transfer was approved.

Virginia Electric is engaged in generating, transmitting, purchasing, distributing, and selling electric energy in Tidewater Virginia, and to a small extent in northeastern North Carolina. Virginia Public Service is engaged in generating, transmitting, purchasing, distributing, and selling electric energy in a territory adjacent on the north and west to that served by the other company, extending from Alexandria, Virginia, southwesterly through central Virginia and the eastern part of West Virginia to Roanoke Rapids, North Carolina, and also in and about Newport News, Virginia. The properties of the two companies are interconnected at several points.

The evidence clearly showed, said the commission, that the companies owned

and operated facilities for the transmission and sale at wholesale of electric energy in interstate commerce. Each is, therefore, a "public utility" within the meaning of the Federal Power Act.

By the proposed transaction Virginia Electric would merge its facilities subject to commission jurisdiction with those of Virginia Public Service, "another person" within the meaning of §203. The merger was accordingly held to be subject to the requirement of §203 of the Power Act that prior authorization should be obtained.

The acquisition was held not to be exempt by reason of §318 of the act as being subject to a requirement of the Holding Company Act, or a rule, regulation, or order of the Securities and Exchange Commission. The Virginia commission had expressly authorized the acquisition, and, therefore, such acquisition, by reason of §9(b) of the Holding Company Act, is not subject to the requirements of §9(a) of that act.

A proposal had been made to charge an excess purchase price to operating expenses, but the proposal was revised so that the excess would be charged off immediately. The commission commented on the original proposal, stating that this would have represented in substance a purchase of prospective revenues to be exacted from consumers and added:

> So long as a prospective purchaser of a utility property has the assurance that consumers can be compelled to foot the bill, there is no incentive to insure that such transactions will be consummated in a manner that will serve the public interest in economical electric service.
>
> Such a bargain may be the result of protracted "arm's-length" negotiations between the buyer and the seller, but the third party to the transaction—the rate-paying customer—is not consulted and has no protection except through the vigilance of regulatory authorities. It was this type of abuse, among others, which the Holding Company Act and the Federal Power Act were designed to prevent.

Re Virginia Electric & Power Co. et al. (Opinion No. 113, Docket No. IT-5878).

Local Transportation by Interstate Carrier

A PETITION by New England Greyhound Lines, Inc., for a certificate of public convenience and necessity authorizing the transportation of passengers by motorbus in intrastate commerce during the national emergency was granted in part by the Connecticut commission, subject to restrictions. This company operates an interstate service, and it proposed to operate a "leap frog" transportation service.

Restrictions were designed to exclude the transportation of intrastate passengers between any two points in Connecticut on the proposed routes where such passengers could be transported by existing motorbus common carriers without transferring from one motorbus to another.

The case was based largely upon the availability of seats on the busses of its interstate service for the accommodation of intrastate passengers, upon the abnormally high demand for transportation service owing to war-time conditions, upon existing interstate service through points in Connecticut having no motorbus service, and upon trips operated by the applicant over its several routes at times in the day or night when existing bus service is not available.

The commission approved several fundamental principles governing its action. The existence of intermediate connecting carriers does not of itself justify a refusal to authorize a through service by a single carrier. The property rights of existing carriers must yield to the paramount public interest in deciding whether the application of another carrier should be granted. A flexible interpretation of the commission's statutory powers under war-time conditions would dictate a policy of the fullest possible utilization of all transportation equipment.

But, the commission added, the test must still be whether the statutory concept of public convenience and necessity has been established and whether the proponents have demonstrated their ability to discharge the obligation of a common carrier which the granting of their application necessarily imposes upon them. *Re New England Greyhound Lines, Inc. (Application No. 2874).*

Reparation Claim against Distributor Rejected by Court in FPC Case

PETITIONS by a customer of Peoples Gas Light & Coke Company and by the attorney general of Illinois for orders directing refunds, based on the reduction in the cost of natural gas purchased from the Natural Gas Pipeline Company, were rejected by the circuit court of appeals in a suit originally arising on petition of the pipe-line company to review a rate order of the Federal Power Commission. A fund accumulated by reason of the court's injunctive process had been distributed, and reparation sought was not in respect to any fund paid into the court by the wholesale company but was based upon rates which, the petitioners alleged, would have been just and reasonable for the distributing companies to charge during the period involved.

Jurisdiction which the court was asked to exercise could not be based upon any authority of the Federal Power Commission inasmuch as that commission has no jurisdiction, and claims none, over the distributing company or its rates. That commission has jurisdiction over certain sales for resale only. The Illinois commission has exclusive jurisdiction over the distributor's rates.

Reservation of jurisdiction in the review proceedings, said the court, was restricted to questions which might arise in connection with the fund on deposit in the court. The court did not reserve jurisdiction as to alleged rights to refunds which might arise subsequently. *Natural Gas Pipeline Co. of America et al. v. Federal Power Commission et al. 141 F(2d) 27.*

Telephone Company Must Continue Service To Publisher of "Scratch Sheet"

THE supreme court of Pennsylvania has reversed the judgment of the superior court, in Pennsylvania Publications *v.* Public Utility Commission (1943) 50 PUR(NS) 108, which sustained the orders of the commission in (1942) 42 PUR(NS) 170, and (1942) 43 PUR(NS) 26, upholding the right of a telephone company to refuse the continuance of telephone and teletypewriter service to publishers of a "scratch sheet." The commission had approved the company's action on the ground that the "scratch sheet" was generally used by bookmakers in connection with registering and recording bets and that the company's facilities would be used, or might be used, in furtherance of horse-race betting in violation of state laws. The primary contention on appeal was that the evidence was insufficient to support the order of the commission.

The court noted the well-established rule that it is the duty of a telephone company to furnish service and facilities without discrimination. This obligation, the court continued, is limited to lawful service. Therefore, public service companies are not compelled to furnish service to "bucket shops" or to subscribers who use their telephones to receive and register bets on horse races in violation of law.

In the instant case, however, the pub-

lisher was held to be engaged in a legal business. The publication of a newspaper featuring horse racing is not illegal. Horse racing is not prohibited by law in the state, and there was said to be nothing in the legislative history to indicate that it is contrary to public policy. Betting is not a necessary concomitant of horse racing. A racing publication conveying information such as this paper, though useful to the gambler in placing his wagers, is not a device or apparatus for gambling. *Pennsylvania Publications, Inc. v. Public Utility Commission.*

Other Important Rulings

THE supreme court of Tennessee held that an electric company, complaining against a commission order reducing rates, had improperly filed its bill in a county other than the county where the company operated, notwithstanding a contention that the company sought a decree holding the order void for failure to give a hearing instead of seeking a review of the rates fixed by the order. The court saw no point in holding that one court had jurisdiction as to one phase of the dispute—that is, whether or not the company was given a legal hearing—and the court of another county exclusive jurisdiction to pass upon the legality of rates made pursuant to such order. *Kentucky-Tennessee Light & Power Co. v. Dunlap et al. 178 SW(2d) 636.*

The Wisconsin commission held that it has power to apportion the cost of the construction of a sidewalk on a highway bridge over a railroad track or on the approaches thereto among the railroads, municipalities, and county involved, such construction being a part of a grade separation project. *Wauwatosa v. Thomson (2-R-1557).*

The Colorado commission held that it had jurisdiction over the operations of the Railway Express Agency, Inc., as a "motor vehicle carrier" within the meaning of the Public Utilities Act, and that a certificate of public convenience and necessity must be obtained for the company's operations throughout the state. Such a certificate was issued. *Re Railway Express Agency, Inc. (Decision No. 22128, Application No. 5901-B).*

The Colorado commission, although authorizing the continuance of a temporary rate which had previously been prescribed with an expiration date of September 5, 1943, held that the rate should not be made retroactive as of that date since such action would have a tendency on the part of carriers to disregard their published schedules, thereby defeating the intention and purpose of the Public Utilities Act. *Re Freight Rates of Common and Private Motor Vehicle Carriers (Decision No. 22107, Case No. 1585).*

The supreme court of Georgia held that municipalities may not issue revenue anticipation certificates payable in future years, to finance the acquisition of an electric distribution system, without assent of two-thirds of the qualified voters of the municipality voting at an election for that purpose. *City of Valdosta et al. v. Singleton et al. 28 SE(2d) 759.*

The supreme court of Texas held that a carrier is not liable for a misquotation of rates resulting in damages to a shipper, since the shipper, as well as the carrier, is conclusively presumed to know the lawful rate and is estopped to say that he relied upon the rate quoted by the carrier and was damaged on account of such reliance. *Southern Pacific Co. v. Southern Rice Sales Co. 178 SW(2d) 264.*

NOTE.—The cases above referred to, where decided by courts or regulatory commissions, will be published in full or abstracted in *Public Utilities Reports.*

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Titles and Index

TITLES

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PUBLIC UTILITIES REPORTS

NEW JERSEY BOARD OF PUBLIC UTILITY COMMISSIONERS

Re New Jersey Power & Light Company

March 28, 1944

INVESTIGATION *of reasonableness of electric rates; "rate adjustment plan" approved.*

Return, § 5 — Sliding scale — "Rate adjustment plan."

A "rate adjustment plan" was adopted as the method to be followed by the Board in establishing and maintaining just and reasonable electric rates to be charged by the utility accepting the plan, under which plan there would be an agreed rate base, a basic rate of return computed with reference to cost of capital, and a stabilizing reserve.

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Return, § 5 — Sliding scale — "Rate adjustment plan" — Duration and revision.
Provision in "rate adjustment plan" for duration and revision of the plan, p. 11.

APPEARANCES: Frank H. Sommer and Harold H. Fisher, Deputy Attorneys General, for the Board; George Rosier, for the respondent.

By the BOARD: The matter of the reasonableness of rates for electric service supplied by New Jersey Power & Light Company was heard by the Board on its own motion under order of the Board dated March 2, 1944. Said order, among other things, suggested a proposed method, identified as the "rate adjustment plan," of establishing and maintaining just and reasonble rates to be charged by said company for electric service. Notice of hearing was served upon all interested parties and no objection was made to the adoption by the Board of said plan.

Evidence was received in the form of oral testimony and exhibits submitted by J. Rhoads Foster, Consultant; Herbert J. Flagg, chief engineer, and Henry Herz, assistant economist, members of the Board's staff; and Malcolm G. Davis, vice president of Gilbert Associates, Inc., consultants for the respondent.

Upon consideration of the evidence in this proceeding, the Board finds and concludes that the existing rates and charges of New Jersey Power & Light Company for electric service are unjust and unreasonable, and that the proposed method of rate regulation, identified as the "rate adjustment plan," and attached hereto, together with an immediate billing credit, provides an appropriate and equitable basis for establishing and maintaining just and reasonable rates for electric service to be charged by the company.

Now, therefore, the Board of Public Utility Commissioners, by virtue of the authority vested in it, does hereby adopt, subject to the company's acceptance of this order, the said rate adjustment plan as the method to be followed by the Board in establishing and maintaining just and reasonable rates to be charged by New Jersey Power & Light Company for electric service.

This adoption of the plan does not establish Board policy, precedents or findings of fact necessarily to be accepted or applied in any proceeding concerning the rates of the electric department of New Jersey Power & Light Company in the event of termination of the plan or concerning the rates of other utilities under the Board's jurisdiction.

For the purpose of making effective the provisions of the plan and making

available to customers an adjustment of charges for electric service, as hereinafter set forth, the Board hereby *orders*

1. That New Jersey Power & Light Company shall allow billing credits on all bills rendered to customers during the month of April, 1944, for electric service taken under the company's residential and general service schedules, identified as Schedules DS and GS in its tariff, in an amount equal to one-half of the first monthly billing based on meter readings made on and after April 1, 1944, and shall file with the Board supplements to said schedules designed to make effective this adjustment of charges for electric service.

2. That New Jersey Power & Light Company shall establish a balance sheet account to be known as "Account 259, Stabilizing Reserve," to which as at December 31, 1943, it shall transfer the amount of $975,000 from earned surplus by debiting Account 271, Earned Surplus, and crediting the said Account 259, Stabilizing Reserve. No debits or credits shall be made to said Account 259, Stabilizing Reserve, except in accordance with the provisions of the plan.

3. That the record in this case shall be kept open until certain contemplated accounting transactions affecting the stated value of the company's common stock and its surplus shall have been completed, but in no case later than December 31, 1944, whereupon the said New Jersey Power & Light Company shall certify to the Board the amount of its equity capital as defined in footnote 10 of the plan hereby adopted, and, subject to approval of the amount by the Board, said amount shall be inserted in said footnote 10. The amount of said equity capital to be inserted in said footnote 10 and which is to be used in the determination of the basic rate of return set forth in said plan shall in no event be less than $4,000,000.

4. That within ten days from the date hereof New Jersey Power & Light Company shall notify the Board as to whether or not it accepts this order and the said rate adjustment plan as the method to be followed in establishing and maintaining just and reasonable rates to be charged by the company for electric service.

5. That upon such acceptance the said plan hereby adopted shall provide the basis for the determination of the rates for the electric department of New Jersey Power & Light Company, so long as said plan shall remain in force and effect.

Rate Adjustment Plan

I. *Purpose of the Plan*

1. This rate adjustment plan (herein called the Plan), set forth in detail herein, was developed by the New Jersey Board of Public Utility Commissioners (herein called the Board) through conferences with New Jersey Power & Light Company (herein called the company). The purpose of the Plan is to establish and maintain just and reasonable rates for electric service by providing definitive rules, standards, and procedures which shall constitute the sole basis whereby the return to the company's electric department shall be subject to annual review, and adjustment when adjustment is required

by the provisions of the Plan, in accordance with the operating results experienced during each preceding calendar year, herein referred to as test year.[1]

2. The Plan establishes (a) standards and formulae for measuring the "experienced return" and for determining the "basic return" for each calendar year; (b) a "stabilizing reserve" to offset in whole or in part any deficiencies of "experienced return" below "basic return"; and (c) a procedure for annual adjustment of return. The operation of the Plan shall follow the provisions specifically set forth in the following sections and accompanying footnotes, which footnotes are an integral part of the Plan.

II. *Experienced Return*

3. The *experienced return* for each test year shall be the amount of electric utility operating income (comprised of operating revenue, less operating expenses, maintenance expenses, depreciation, taxes, and other operating revenue deductions, plus income from rent of utility plant) as reported by the company for the electric department and accepted by the Board for the purposes of the Plan, subject to the following adjustment and treatment of specific items:

(a) Profit or loss from merchandising, jobbing, and contract work shall be considered as a credit or charge to operating revenue deductions.

(b) Extraordinary or infrequently incurred items of operating revenue deductions may be spread over a reasonable amortization period, beginning with the year of the expenditure, as approved or directed by the Board.

(c) The amounts of taxes, other than Federal taxes based upon income, shall be included in operating revenue deductions at the amounts of calculated or estimated tax liabilities.

(d) The amount of revenue deductions for Federal taxes based upon income shall be computed for the company at the tax rates effective for the test year applied to the incomes upon which taxes are based established in accordance with the provisions of the applicable statutes and regulations governing the filing of separate returns. The taxes so determined for the company shall be reasonably apportioned to the electric department.

(e) In the event the incomes upon which the taxes are based, as determined under the provisions of Par 3 (d), should be increased or decreased by nonrecurring charges or credits of substantial amounts, such taxes based upon income shall be included in the determination of the experienced return for the test year at the amounts of the taxes which would have been computed had said charges or credits not been available for the calculation of incomes upon which the taxes are based. When any such special reduction in, or addition to, calculated taxes is the result of additions to, or changes in, capitalization, the amount of said difference in calculated taxes shall be applied to reduce or increase the amount of unamortized debt discount and expense which is to be amortized over the appropriate period of years

[1] *Test year* means the immediately preceding completed calendar year for which experienced return and basic return are to be, or have been, determined for the purpose of the Plan. The first test year under this Plan shall be 1944.

in accordance with the provisions of Par 6 and related footnotes.

(f) A charge of $43,582 shall be included in operating revenue deductions for each of twenty years, beginning with 1944, to amortize amounts aggregating $871,640 included in the rate base as at January 1, 1944, which are not subject to depreciation under the provisions of the uniform system of accounts.

III. *Rate Base*

4. The *rate base* for each test year, which establishes the basic return when multiplied by the basic rate of return for the test year, shall be the sum of:

(a) $16,750,000;

(b) total gross additions[2] from January 1, 1944, to the beginning of the test year; and

(c) one-half of gross additions during the test year;

less the sum of: (d) total gross retirements[3] from January 1, 1944, to the beginning of the test year;

(e) one-half of gross retirements during the test year;

(f) net change in the depreciation reserve[4] from January 1, 1944, to the beginning of the test year;

(g) one-half of the net change in the depreciation reserve during the test year; and

(h) accumulated amortization of amounts as provided under Par 3(f), to middle of the test year, but not more than a total of $871,640;

plus working capital consisting of:

(i) average book cost of materials and supplies, including fuel, on hand at the end of each monthly accounting period during the test year; and

(j) average cash requirements taken at one-ninth of test year operating revenue deductions (exclusive of taxes, depreciation expense, and net debits or credits for energy interchanged and power purchased and sold) less the average of the two lowest month-end balances in the tax accrual and tax reserve accounts during the test year, provided that the resulting difference shall not be taken at a negative amount. Balances in tax accrual and tax reserve accounts, for the purpose of this paragraph, shall be taken before debits representing tax payments made in advance of the dates permitted by law or governmental regulation.

IV. *Basic Rate of Return*

5. The *basic rate of return,* to be determined for each successive test year, shall be the sum (rounded to the nearest hundredth of one per cent) of the debt capital component, preferred stock capital component and equity capital component.

6. The *debt capital component* for each test year shall be the debt capital

[2] *Gross additions* means original cost of used and useful property installed or acquired by the electric department and charged to electric plant accounts, plus such amounts of acquisition cost in excess of original cost (incurred subsequent to January 1, 1944) as may be approved by the Board for inclusion in the rate base.

[3] *Gross retirements* means original cost of property retired from service and credited to electric plant accounts, plus the retirement or amortization of items of acquisition cost in excess of original cost, where incurred subsequent to January 1, 1944, and approved by the Board for inclusion in the rate base in accordance with the definition of gross additions.

[4] *Net change in depreciation reserve* means the net increase (or decrease) in depreciation reserve, being the difference between (a) amounts charged to operating expense and credited to the reserve for depreciation of electric plant, and (b) amounts charged to the reserve to record the net cost of retirements.

cost rate[5] multiplied by the ratio of debt capital[6] to total capital.[7]

7. The *preferred stock capital component* for each test year shall be the preferred stock capital cost rate[8] multiplied by the ratio of preferred stock capital[9] to total capital.

8. The *equity capital component* for each test year shall be the equity capital return rate, determined according to the formula stated in Par 9 to 12, multiplied by the ratio of equity capital[10] to total capital.

9. The *equity capital return rate* for each test year shall be the average earnings-price ratio, determined according to the provisions of Pars 10 and 11, multiplied by the *capital structure factor* corresponding to the percentage ratio of equity capital of the company to total capital of the company, according to the following table:

Per Cent of Equity to Total Capital	Capital Structure Factor
10% or less	2.16
15%	1.80
20%	1.60
25%	1.44
30%	1.33
35%	1.25
40%	1.18
45%	1.12
50%	1.07
60%	1.01
70%	0.94
80%	0.90
90%	0.86
100%	0.82

[5] *Debt capital cost rate* means the percentage ratio of annual requirements of debt capital to total debt capital. *Annual requirements of debt capital* shall comprise total interest charges actually incurred during each test year, plus the sum of annual amortization on straight-line bases of the following: (a) total debt discount (or premium) and expense and call premium, heretofore incurred on all prior and present issues of debt capital, to the date of maturity of the present 4½ per cent bonds of 1960, which item shall be taken at $589,470 as of January 1, 1944; (b) debt discount (or premium) and expense, hereafter incurred in connection with new or refunding issues of debt capital, to dates of maturity of such issues; (c) call premium or expenses of acquisition and other expenses on present or future issues of debt capital, hereafter reacquired and held in the company's treasury, to the dates of maturity of such issues; and (d) call premium and expense on present or future issues of debt capital, hereafter refunded, to the dates of maturity of the refunding issues. A proportionate share of any unamortized debt discount (or premium) and expense related to a particular issue of debt capital called in part or in whole and retired, but not refunded or replaced in like amount, shall be extinguished together with the related call premium at the time of retirement. Unamortized debt discounts (or premiums), expenses and call premiums shall be adjusted in accordance with the provisions of Par. 3(e) covering calculated tax savings resulting from related refunding or other adjustment of debt capital.

[6] *Debt capital* means the average of the month-end totals during each test year of (a) the principal amount of debt outstanding (including debt held in the company's treasury) having an initial term or terms in excess of five years; plus (b) unamortized premium received; and minus (c) unamortized debt discount and expense and call premium on the outstanding and refunded issues of debt obligation. Said debt discount (or premium) and expense and call premium shall be as defined for the purpose of determining the annual requirements of debt capital. Total debt capital shall be taken at $8,410,530 as of January 1, 1944.

[7] *Total capital* means the sum of debt capital, preferred stock capital and equity capital as defined.

[8] *Preferred stock cost rate* means the percentage ratio of total dividends paid or accrued during each test year to total preferred stock capital.

[9] *Preferred stock capital* means the average of the month-end totals during each test year of (a) par or stated value of preferred stock outstanding (including preferred stock held in the company's treasury); plus (b) total premiums received; and minus (c) total discounts and expenses experienced and call premiums paid on the outstanding and refunded issues of preferred stock. Total preferred stock capital shall be taken at $2,803,160 as of January 1, 1944 (comprised of $3,306,000 of stated value and $502,840 of net premiums, discounts, expenses and call premiums heretofore incurred). A proportionate share of any premiums, discounts and expenses related to a particular issue of preferred stock capital called in part or in whole and retired, but not refunded or replaced in like amount, shall be extinguished together with the related call premium at the time of retirement.

[10] *Equity capital* means the average of the

Capital structure factors for intermediate percentage ratios of equity capital to total capital shall be interpolated from the above table on a straight-line basis.

10. The *average earnings-price ratio* for each test year shall be the arithmetic mean of the yearly earning-price ratios, determined according to the provisions of Par 11, for the test year and the two preceding calendar years.

11. The *yearly earnings-price ratio* for each test year shall be the arithmetic mean of the median four among the earnings-price ratios[11] for the common stocks of the following ten companies:

Boston Edison Company

Central Hudson Gas & Electric Company

Cleveland Electric Illuminating Company

Commonwealth Edison Company and Subsidiaries

Connecticut Light & Power Company, The

Consolidated Edison Company and subsidiaries

Consol. Gas, Elec. Lt. and Power Co. of Baltimore

Detroit Edison Company

Philadelphia Electric Company

Pennsylvania Water and Power Company.

For the purposes of the computation of equity capital return rate the yearly earnings-price ratio for any test year shall not be taken at less than 6½ per cent nor at more than 9 per cent. In the event the yearly earnings-price ratios as herein determined are more than 9 per cent or less than 6½ per cent for three consecutive years, the reasonableness of the said limits and of the bases adopted for computing the equity capital return rate shall be subject to reconsideration.

12. If the required information is not available for any of the above listed common stocks at the time of determination of the basic rate of return for any test year, the number of such common stocks shall be maintained at ten by substituting, for such test year only, the common stocks of other electric or electric-gas combination operating utilities. Such substitution shall be made in accordance with the following order of preference:

(a) electric utilities with annual gross operating revenues of from five to fifty million dollars and located in the New England, Atlantic, and East North Central states;

(b) electric-gas combination utilities of the said size and located in the said areas;

(c) electric utilities located anywhere within the United States; and

(d) electric-gas combination utilities located anywhere within the United States.

When more than one utility is

month-end totals during each test year of stated (book) value of common stock, plus earned surplus and capital surplus, and minus flotation commissions and expenses experienced in connection with the issuance of common stock. Total equity capital shall be taken at $——— as of January 1, 1944.

[11] *Earnings-price ratio* means the percentage ratio of income available per share of common stock during the test year to the average of the monthly highest and lowest market prices of the selected company's common stock during the twelve months of the test year (bid quotations shall be substituted, if no transactions are reported). In the event a calendar year income statement for the test year is not available for any selected company, the latest twelve months' statement available on March 15th of the following year shall be used.

available in accordance with this order of preference, the utility with the largest annual operating revenue shall be substituted.

V. *Basic Return*

13. The *basic return* in each test year shall be an annual amount equal to the rate base multiplied by the basic rate of return, less 3 per cent of the balance in the stabilizing reserve at the beginning of the test year.

VI. *Stabilizing Reserve*

14. A *stabilizing reserve* shall be established and maintained under the provisions of this Plan for the purpose of offsetting in whole or in part, to the extent of any balance in the reserve, any return deficiency [12] experienced during any test year, by a transfer from the reserve to the company's earned surplus.

15. The stabilizing reserve shall be created, upon adoption of the Plan, by a transfer at December 31, 1943, of $975,000 from the company's earned surplus.

16. The stabilizing reserve shall be credited and earned surplus debited, for the test year 1944 and each test year thereafter, with amounts determined in accordance with the following schedule, so long as the amount in the reserve is less than 6 per cent of the rate base at the end of the test year:

(a) the full amount of any additional return [13] up to the amount of the basic reserve requirement; [14] plus

(b) one-half of any additional return in excess of any amount required to be transferred in accordance with Par 16(a).

All credits to stabilizing reserve, based upon results of a particular test year, shall be considered to be made as at December 31st of the test year.

17. In the event that, as the result of any extraordinary charge, the balance in earned surplus available for the payment of preferred stock dividends is reduced to less than a periodic preferred stock dividend requirement, any existing balance in the stabilizing reserve may be transferred to such earned surplus in amount sufficient, but no more than required, to permit payment of such a preferred stock dividend. When debits to the stabilizing reserve are made as the result of application of this paragraph, the amounts so debited shall be restored to the stabilizing reserve by crediting the reserve and debiting surplus accumulated out of earnings available for corporate purposes, and no common dividends shall be declared or paid until the amount so transferred is thus restored.

18. Additional return not required to bring the stabilizing reserve up to 6 per cent of the rate base, as provided in Par 16, shall be available to the company for general corporate purposes, subject to the provisions of Par 17.

19. During the year immediately following a test year in which a return deficiency is experienced an amount equal to the return deficiency,

[12] *Return deficiency* means any amount by which the experienced return is less than the basic return for a test year.

[13] *Additional return* means the amount in dollars by which the experienced return exceeds the basic return for a test year.

[14] *Basic reserve requirement* means any amount by which the balance in the stabilizing reserve, before the credit or debit to the reserve on account of operating results during the test year, is less than 4½ per cent of the rate base at the end of the test year.

or such part thereof as is not in excess of the balance in the stabilizing reserve, shall be transferred to earned surplus from the balance, if any, in the stabilizing reserve. Said transfer, for the purposes of the Plan, shall be considered to be made as at December 31st of the test year.

20. Return deficiencies accumulated during not more than two consecutive test years after the year in which the balance in the stabilizing reserve has been entirely exhausted, when such return deficiencies have not been made the bases of rate increases, shall be recouped in full by application of the additional return available in subsequent test years, before any such additional return shall be credited to the stabilizing reserve.

VII. *Adjustments of Rate Schedules*

21. *Rate adjustments,* calculated to cause a reduction in future experienced return, shall be made effective during the year following each test year for which an additional return has been experienced, which additional return is in excess of any amount required to be transferred to the stabilizing reserve under the provisions of Par 16, except as hereinafter specifically provided in Pars 23 and 24. Rate adjustments, calculated to cause an increase in future experienced return, may be made during the year following each test year in which a return deficiency has been experienced, subject to the qualifying provisions set forth hereinafter in Pars 25, 26, and 27.

22. Solely for the purpose of establishing the amount of any calculated rate adjustment that may be made in the year following any test year during which a revision of the electric department's rate schedules was made, the amounts of experienced return and additional return or return deficiency shall be determined for such test year by adjusting the actual experienced return to the basis of a full twelve months' application of the said revised rate schedules together with associated adjustments of taxes related to income computed in accordance with the provisions of Par 3, and taxes related to revenue at the tax rates in effect for the test year. If no revision of the electric department's rate schedules was made during the test year, the actual additional return or return deficiency shall form the basis for establishing the amount of any calculated rate adjustment required under the provisions of this Plan.

23. The amount of additional return in any test year, adjusted, if necessary, in accordance with Par 22 and multiplied by the ratio of (a) additional return [15] available to the company for general corporate purposes to (b) total additional return [15] shall form the basis for the calculated reductions of future operating revenues and future experienced return to be placed into effect during the year following the test year. The amount of such calculated reduction of future experienced return shall be determined as follows:

[15] Before application of Par 22.

—Column 1— Additional Return Available for Measurement of Reduction of Future Experienced Return as Provided in this Paragraph	—Column 2— Amount of Calculated Reduction of Future Experienced Return Expressed as Percentages of Amounts in Column 1.
Amount equivalent to the first one per cent or less of the rate base	60 per cent
Amount equivalent to the next one per cent of the rate base	75 per cent
Amount equivalent to the excess over 2 per cent of the rate base	85 per cent

24. Upon application by the company, and approval by the Board, all or a part of the amount determined to be available for reduction of rates in any year following a test year may be returned to customers as a billing credit or credits.

25. In the event a return deficiency exists in any test year (after adjustment in accordance with Par 22) the company may file revised rate schedules designed to increase future experienced return in an amount to be determined from the adjusted return deficiency of the test year, considered in relation to the balance in the stabilizing reserve at the end of the test year before any debits to the stabilizing reserve on account of the return deficiency for the test year. The amount of the increase to future experienced return shall be determined as follows:

(a) The amount of return deficiency equivalent to the balance (if any) in the stabilizing reserve in excess of $1\frac{1}{2}$ per cent of the rate base shall be excluded from the amount of adjusted return deficiency with respect to which rate increases shall be measured;

(b) The remaining amount of adjusted return deficiency equivalent to all or any part of the balance in the stabilizing reserve up to $1\frac{1}{2}$ per cent of the rate base shall be the measure of the increase in future experienced return to the extent of 50 per cent of such amount of adjusted return deficiency;

(c) If there is any remaining amount of return deficiency in excess of the total balance in the stabilizing reserve, it shall be the measure of the increase in future experienced return to the extent of 100 per cent of such amount of adjusted return deficiency.

26. The company may elect not to file schedules providing for increased rates if it considers rate increases to be unnecessary or undesirable, provided that such election at the time of the annual proceeding shall not bar the company from filing such schedules at a later time time during the year.

27. All computations of adjustments to experienced return and revenues of the year following a test year shall be based upon customers, kilowatt-hour sales and revenues of the test year, after adjustments to give effect to a full twelve months' application of any revised rate schedules effective during such test year, and shall give effect to taxes related to income computed in accordance with the provisions of Par 3, and revenue, at tax rates effective for the test year. No adjustment of rates shall be made under this Plan unless the estimated annual effect on future experienced return is at least $10,000.

VIII. *Administration of Plan*

28. As promptly as may be prac-

ticable after the end of each test year the company shall submit to the Board a verified report showing for the test year all financial and operating data which may be required in the administration of the Plan. Basic computations and other data pertinent to administration of the Plan shall be made available for review and examination by the Board and its staff.

29. The annual proceeding with respect to application of the Plan to each test year shall be concluded at a time which will permit any revised rate schedules or tariff to become effective on April 1st, if possible, of the year immediately following the test year.

30. In the event a rate adjustment is to be made under the provisions of Pars 23 to 25, inclusive, the company shall submit to the Board, if possible in advance of April 1st of the year immediately following the test year under consideration, revised rate schedules or a tariff designed to effect the required adjustment of future revenue and experienced return. When the Board is satisfied that such revised rate schedules or tariff are designed to effect the required adjustments of future revenue and experienced return, that they conform to the requirements of the Plan and that they provide for a reasonable distribution of the adjustment among the several classes of service, they shall be accepted to become effective as soon as practicable after such acceptance.

31. The annual determination of experienced return and basic return for the preceding test year, when accepted by the company, shall be conclusive and not subject to retroactive adjustment.

IX. *Duration and Revision*

32. This Plan shall be effective December 31, 1943, and subject to the provisions of law shall continue in effect for an indeterminate period subject to termination by either the Board or the company. Notice of intention to terminate the Plan shall be in writing and may be filed by either the Board or the company at any time during a calendar year, but not later than sixty days following the determination of the application of the provisions of the Plan to the operations of the test year, said termination to be effective at the end of the calendar year.

33. In the event of termination of the Plan, one-half of the balance in the stabilizing reserve, as of the end of the year of termination, determined in accordance with the provisions of the Plan governing such determination, which is in excess of $250,000 shall become the measure, after adjustment for taxes, of the total amount of billing credits to be made subsequent to the date of termination. The said billing credits shall be applied in a manner ap-approved by the Board and shall be made in individual amounts of not more than one-half of a calendar month's billings at intervals of not less than six months, until the total amount of such billing credits has been applied.

34. In the event the Plan is terminated, the balance in the stabilizing reserve as of the end of the year of termination shall be determined in accordance with the provisions of the Plan governing such determination and, if a credit balance, shall be disposed of as follows:

(a) the balance in the stabilizing reserve, but not more than the initial balance of $975,000, less the portion of such balance equivalent to the measure of the billing credits to be distributed to customers, as provided in Par. 33 above, shall be transferred to capital surplus;

(b) the remaining amount in the stabilizing reserve shall be transferred to earned surplus.

35. The Plan herein set forth shall be subject to modification and revision in the event of unforeseen circumstances which make such modification or revision desirable.

UNITED STATES CIRCUIT COURT OF APPEALS, NINTH CIRCUIT

Pacific Power & Light Company et al.

v.

Federal Power Commission

No. 10386
— F(2d) —
March 10, 1944

PETITION *for review of order of Federal Power Commission relating to accounting; affirmed. For Commission decision, see (1942) 46 PUR(NS) 131.*

Evidence, § 26 — Testimony of Commission's accountants.

1. The Commission may proceed on the testimony of expert accountants, whether they are attached to its staff or are retained by a regulated utility, so long as the Commission is satisfied of their integrity, p. 15.

Appeal and review, § 28.2 — Accounting rulings — Federal Power Commission.

2. It is not for the courts to resolve differences of opinion among accounting authorities by reversing an order of the Federal Power Commission, having substantial support in the record, prescribing accounting requirements, p. 15.

Accounting, § 32 — Acquisition cost — Amortization of excess over original cost — Fair value factor.

3. An order requiring a power company to amortize and eliminate from plant accounts an amount in Account 100.5, Electric Plant Acquisition Adjustments, is not open to objection on the ground that it disregards the present fair value of the property and that elimination of the acquisition cost of intangibles from the fundamental accounts distorts the base for rate-making purposes, p. 15.

Accounting, § 32 — Acquisition adjustments — Amortization.

4. An order of the Federal Power Commission requiring a company to

eliminate from Account 100.5, Electric Plant Acquisition Adjustments, an amount representing excess of acquisition cost over original cost, by amortizing such amount over a 10-year period by annual charges to income, should be sustained when having substantial support in the record, p. 15.

Before: Garrecht, Stephens, and Healy, Circuit Judges.

HEALY, C. J.: This is a proceeding for review, under § 313(b) of the Federal Power Act, 49 Stat 847, 16 USCA § 825*l*(b), of an order of the Federal Power Commission (1942) 46 PUR(NS) 131, requiring Pacific Power & Light Company to correct its electric plant accounts in conformity with a finding of the Commission.

Originally the petition attacked a provision of the order requiring Pacific to eliminate an acquistion "write-up" (classified in Account 107) by a charge to surplus; but objection to this feature has been abandoned in the light of holding in Northwestern Electric Co. v. Federal Power Commission, — US —, 88 L ed —, 52 PUR (NS) 86, 64 S Ct 451, decided January 31, 1944. The only part of the order now challenged is Par (H) providing for the amortization of an amount of $2,741,591.66 by annual charges to income over a 10-year period beginning in 1942. This amount is the portion of the acquisition cost to Pacific of a number of utility systems which is in excess of the original cost thereof. The amount has been placed in Account 100.5, Electric Plant Acquisition Adjustments. Amounts so recorded are required under the Commission's system of accounts, to be "depreciated, amortized, or otherwise disposed of, as the Commission may approve or direct." The dispute is whether the amount should have been permitted to remain in this account, as petitioners contend, or whether the Commission properly ordered its gradual elimination.

A brief review of the manner in which Pacific acquired its properties will suffice, since the facts are not in dispute. American Power & Light Company is the parent company of Pacific and owns all the latter's common stock. As early as 1909 American began the acquisition of numerous small and scattered electric utility properties in the Pacific Northwest with the idea of combining them into an integrated system. In 1910 American caused Pacific to be organized and to this subsidiary it transferred the properties acquired. The amount classified in Account 100.5 had its genesis in these acquisitions, the great bulk of which were made twenty to thirty-three years ago. A few of the plants were acquired by American for less than their original cost, but the acquisition cost of most of them was in excess of the original cost to the persons first devoting them to public service. As already said, the amount in Account 100.5 represents the net excess of acquisition cost over original cost. It is not questioned that the transactions in which American acquired the properties were arm's-length transactions or that the payments therefor were bona fide.

The Commission's Uniform System of Accounting requires that utility companies reclassify their electric plant accounts by prescribed accounts

on the basis of "original cost," that is to say, the cost of operating units or systems to the persons first devoting them to public service. In the case of properties acquired as these were the excess of acquisition cost over original cost thus disclosed is required to be transferred to Account 100.5. The power of the Commission to prescribe a uniform system of accounting and to require the utility company to keep accounts accordingly is not now open to question. The law on the subject has been sufficiently covered in the opinions of this court in Northwestern Electric Co. v. Federal Power Commission (1942) 43 PUR(NS) 140, 125 F(2d) 882, and (1943) 48 PUR (NS) 65, 134 F(2d) 740, and in the affirming opinion of the Supreme Court, Northwestern Electric Co. v. Federal Power Commission, *supra,* and we need not go over the matter again.[1]

The present case, like that involving the Northwestern Electric Company, appears to us to present no more than a problem of proper accounting. The decisive inquiry is whether the Commission's order has substantial support in the record.[2] The Commission found that the sum classified in Account 100.5 represents payment for intangibles, such as good will, going value, nuisance value, and franchise and monopoly values, all of which were thought to be rooted in and associated with prospective earning power.[3] Said the Commission at p. 139 of 46 PUR(NS): "It is common knowledge that intangibles have questionable continuing value even in an unregulated industry. They should not be permitted to rest permanently in the accounts of a public utility, and the record of this case shows that the proper accounting treatment is to amortize them rapidly."[4]

The Commission's expert accountants testified that intangibles bought and paid for have no permanent place in the plant accounts of a public utility, that "intangibles are evasive and disappear without being seen," and that there is no more reason to retain permanently the cost of the intangible in the accounts than there is to retain the cost of tangible property after it has been physically retired. These witnesses pointed out that the intangibles in this instance have been on the books a great many years, and stated that in

[1] These cases affirmed the Commission's authority to require the recording of a write-up in Account 107, Electric Plant Acquisition Adjustments, and the elimination of the write-up by applying net income above preferred stock dividend requirements.

[2] Section 313(b) of the act provides that "the finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive."

[3] The treasurer of Pacific testified that he thought it "fair to say that the amount paid by American in excess of the original cost for those properties represented payment for intangibles." Whether this witness agreed that these intangibles are rooted in prospective earning power is here a subject of dispute.

[4] The Commission quoted from Sanders, Hatfield & Moore, *A Statement of Accounting Principles,* published in 1938 by American Institute of Accountants. The authors, speaking of intangible assets such as good will, state that the knowledge that good will has been widely used to capitalize exaggerated expectations of future earnings leaves an almost universal feeling that the balance sheet looks stronger without it. "When actual consideration has been paid for good will it should appear on the company's balance sheet long enough to create a record of the fact in the history of the company. . . . After that, nobody seems to regret its disappearance when accomplished by methods which fully disclose the circumstances." While these statements refer to good will, the authors say that "good will is the most important and the typical intangible asset, so that a discussion of it will in part serve for the group."

Consult also Preinreich, *The Law of Goodwill,* Dec. 1936, 11 Acctg. Rev. 317, 325, 326, where it is said that "franchise, going value, and good will are one and the same thing."

their judgment correct accounting practice indicated that the amount in Account 100.5 be disposed of in the manner later ordered by the Commission. We may add that the physical property with which these intangibles were associated was not shown to be in existence as of the present day.

[1-4] Petitioners argue that it is contrary to the concept of due process to treat as substantial evidence the testimony of the Commission's own accountants; and they cite accounting authorities to prove that there is marked difference of opinion and practice as to whether or not good will should be written off, and if so, by what steps.[5] We think the regulatory body may proceed on the testimony of expert accountants whether they are attached to its staff or are retained by the utility, so long as the Commission is satisfied of their integrity. It is not for the courts to resolve differences of opinion among accounting authorities. Northwestern Electric Co. v. Federal Power Commission (1944) — US —, 88 L ed —, 52 PUR(NS) 86, 64 S Ct 451. "What has been ordered must appear to be 'so entirely at odds with fundamental principles of correct accounting' as to be the expression of a whim rather than an exercise of judgment." American Teleph. & Teleg. Co. v. United States (1936) 299 US 232, 236, 81 L ed 142, 16 PUR(NS) 225, 57 S Ct 170.

It is complained that the order was made in disregard of the present fair value of Pacific's properties, and that the elimination of the acquisition cost of these intangibles from the fundamental accounts of the utility distorts its base for rate-making purposes. However, this is not a proceeding for the fixing of rates. The order does not prohibit the keeping of other accounts and Pacific may maintain a record of the acquisition cost of these intangibles for whatever such record may be worth, as it may maintain other accounts "which will give information with regard to estimated present appreciated value of its assets," Northwestern Electric Co. v. Federal Power Commission, *supra*, 52 PUR(NS) at p. 90.

It is contended that the Commission's order is at loggerheads with the holding of the Supreme Court in American Teleph. & Teleg. Co. v. United States, *supra*. Speaking of a system of accounts promulgated by the Federal Communications Commission, and referring to an account similar to Account 100.5, the court there said [p. 240] that the Commission is not under a duty to write off the whole or any part of the balance in such an account "if the difference between original and present cost is a true increment of value." From this and other language of the opinion it is argued that the difference between original and present cost shown on the company's books may not be written off if it represents a true increase of value. But the court also intimated that the acquisition cost in excess of original cost could properly be disposed of after the character of the item had been determined. It said [p. 242] that the item is "subject to be taken out of that account and given a different character if investigation by the Commission shows it to be de-

[5] Sanders, Hatfield & Moore, in their work quoted from in note 4, *supra*, state that while the "regular amortization of good will is not considered imperative," such treatment "is not considered objectionable."

serving of that treatment," and that the disposition of the item "must depend upon evidentiary circumstances, difficult to define or catalogue in advance of the event." In the case before us the Commission found that the capitalization of these intangibles represents essentially a capitalization of prospective earning power,[6] having no continuing place in the accounts of a public utility. As already intimated, we think the evidence supports the finding.

While the objection was not urged in petitioners' applications for rehearing before the Commission, it is here claimed that the amortization, if made at all, should have been made as an operating expense rather than as an income deduction. Section 313(b) of the act does not permit review unless the specific grounds of objection are urged upon the Commission. However, it would seem that Pacific's income available for surplus is the same whether the amortization is made as an operating expense or as an income deduction, and in neither event are we able to see that Pacific is deprived of any property. Aside from the testimony of the Commission's experts, a number of accounting authorities are cited in support of the propriety of charging the item against income.

The Commission's order is affirmed.

[6] Consult Niagara Falls Power Co. v. Federal Power Commission (1943) 51 PUR(NS) 40, 137 F(2d) 787, 794.

UNITED STATES CIRCUIT COURT OF APPEALS, FIRST CIRCUIT

American Power & Light Company et al.

v.

Securities and Exchange Commission

Nos. 3823, 3824
— F(2d) —
March 17, 1944

PETITION *for review of orders of Securities and Exchange Commission requiring dissolution of subholding companies pursuant to § 11 (b)(2) of the Holding Company Act; orders affirmed. For Commission decision, see (1942) 46 PUR (NS) 321.*

Appeal and review, § 18 — Scope of review — Objection not raised below.

1. A court reviewing an order of the Securities and Exchange Commission under § 24(a) of the Holding Company Act, 15 USCA § 79x(a), must decline to consider objections which were not urged before the Commission, and under this rule companies objecting to Commission orders under § 11(b)(2) of the act, 15 USCA § 79k(b)(2), were obliged to raise before the Commission issues as to its statutory authority, p. 24.

Appeal and review, § 18 — Scope of review — Questions not raised below — Effect of stipulation.

2. A stipulation reserving in general terms all legal and constitutional rights, including the right to full judicial review of Commission findings, opinion, and order, can only mean judicial review according to law, and it cannot confer upon a court power to review questions which § 24(a) of the Holding Company Act, 15 USCA § 79x(a), forbids the court to review because they were not raised before the Commission, p. 24.

Intercorporate relations, § 19.3 — Simplification of holding company system — Effect of war conditions.

3. An order of the Securities and Exchange Commission requiring simplification of a holding company system, pursuant to § 11(b)(2) of the Holding Company Act, 15 USCA § 79k(b)(2), is not objectionable on the ground that it is not practicable during a war period to require the acts provided for therein in view of the effect of the emergency created by the war, including the depressed condition of financial markets and present uncertainties and difficulties of the national economy, p. 25.

Intercorporate relations, § 19.8 — Simplification of holding company system — Incompleted integration proceedings.

4. The Securities and Exchange Commission is not required to institute and complete proceedings under § 11(b)(1) of the Holding Company Act, 15 USCA § 79k(b)(1), looking toward the integration of operating subsidiaries, before it is authorized to enter an order in simplification proceedings under § 11(b)(2) of the act, 15 USCA § 79k(b)(2), p. 26.

Intercorporate relations, § 19.8 — Simplification of holding company system — Consolidation of proceedings.

5. Refusal by the Securities and Exchange Commission to grant motions, by companies involved in simplification proceedings under § 11(b)(2) of the Holding Company Act, 15 USCA § 79k(b)(2), to consolidate hearings on plans tardily submitted under § 11(e) does not constitute an abuse of discretion when hearings on the § 11(e) plans would unduly prolong § 11 (b)(2) proceedings and there appear to be certain defects in the plans which would render them inadequate to accomplish their purported purpose of meeting the statutory requirements, p. 26.

Intercorporate relations, § 19.7 — Simplification of holding company system — Structure of system.

6. Organizational changes in a holding company system, designed to give subholding companies the semblance of being independent entities, were held to be superficial and in no way curing their vulnerability under § 11 (b)(2) of the Holding Company Act, 15 USCA § 79k(b)(2), where each subholding company was given a complement of officers and employees of its own and assigned separate offices in the holding company's office building and the former interlocking between the boards of directors of the companies was substantially terminated, while at the same time a service company, wholly owned by the top holding company, entered into service contracts with subsidiaries of the subholding companies, p. 30.

Intercorporate relations, § 19.7 — Simplification of holding company system — Structure of system.

7. A conclusion by the Securities and Exchange Commission that the continued existence and corporate structure of certain subholding companies, forming the central tier in a holding company system, rendered the system

unduly and unnecessarily complex within the meaning of § 11(b)(2) of the Holding Company Act, 15 USCA § 79k(b)(2), was not unwarranted, where the subholding companies performed no functional purpose in the management of their operating subsidiaries (which were grouped together for purposes of management on geographical lines irrespective of holding company affiliation), no substantial amount of risk capital was furnished to the operating companies by either the subholding companies or a top holding company, subsidiary companies could have obtained loans from banks at lower rates than from their parent companies, income from the basic functions of the system could not reach the common stockholders of the top holding company until it had been filtered through seven to fourteen classes of securities having prior claims to such earnings, dividend arrearages had resulted from complexity of the system, and the problem of income appraisal and assets value appraisal of securities of the company had become unduly complex, p. 30.

Corporations, § 18 — Distribution of voting power — Holding company.

8. The capital structure and continued existence of subholding companies unfairly and inequitably distribute voting power among security holders of a holding company system, within the meaning of § 11(b)(2) of the Holding Company Act, 15 USCA § 79k(b)(2), where, through ownership of common and preferred stock representing on the books an interest of only less than 9 per cent in the total capitalization of subholding company subsidiaries, a top holding company controls an immense pool of capital, p. 33.

Corporations, § 18 — Distribution of voting power — Holding Company — Capitalization interests — Exclusion of bonded indebtedness.

9. Bonded indebtedness need not be excluded from capitalization totals for the purpose of comparing the interest of a top holding company with the total capitalization of subsidiaries to determine whether holding company control is exerted through disproportionately small investment, p. 33.

Intercorporate relations, § 19.8 — Simplification of holding company system — Evidence — Value of assets.

10. Valuation testimony purporting to show the present value of assets and securities is properly excluded as irrelevant to pending issues in a simplification proceeding pursuant to § 11(b)(2) of the Holding Company Act, 15 USCA § 79k(b)(2), although such evidence may become relevant at a later stage in proceedings under § 11(d) or § 11(e), 15 USCA § 79k (d), (e), p. 33.

Appeal and review, § 28.9 — Scope of review — Simplification of holding company system — Choice of remedy.

11. The choice of remedy in a proceeding under § 11(b)(2) of the Holding Company Act, 15 USCA § 79k(b)(2), relating to simplification of a holding company system, is a matter confided primarily to the expert judgment of the Commission, and in this field the courts are loath to set up their own judgment in opposition to that of the administrative tribunal, p. 34.

Corporations, § 15 — Dissolution of holding company — Simplification of system.

12. An order requiring dissolution of subholding companies, as a remedy for insuring that the corporate structures and continued existence of the companies would no longer unduly complicate the structure of a holding company system or unfairly distribute voting power among the security holders of the system, was held not to be so lacking in rational basis as

to amount to an arbitrary and capricious act outside the broad scope of discretion confided to the Securities and Exchange Commission, p. 34.

Intercorporate relations, § 19.7 — Simplification of holding company system — Choice of remedy.

13. The Securities and Exchange Commission is not obliged, if there is a possible choice of remedy, to select the least drastic remedy which leaves subholding companies in existence in proceedings under § 11(b)(2) of the Holding Company Act, 15 USCA § 79k(b)(2), relating to simplification of a holding company system, p. 34.

Interstate commerce, § 84 — Regulation of holding companies — Simplification of system.

14. Section 11 of the Holding Company Act, 15 USCA § 79k, relating to the simplification of holding company systems, is not beyond the power of Congress under the commerce clause, p. 36.

Interstate commerce, § 84 — Simplification of holding company system — Findings by Commission.

15. The Securities and Exchange Commission, in a proceeding to simplify a holding company system under § 11(b)(2) of the Holding Company Act, 15 USCA § 79k(b)(2), need not find that the existing complexities of structure and inequitable distribution of voting power are adversely affecting interstate commerce in the particular case, since Congress has found in § 1 of the act, 15 USCA § 79a, that these evils often materially affect interstate commerce in which the holding company is engaged, and there is ample basis for such finding in the reports of the Federal Trade Commission and of the committees of Congress which form the basis of the legislation, p. 36.

Corporations, § 9 — Orders requiring dissolution — Powers of Federal government.

16. Orders of the Securities and Exchange Commission, under § 11(b)(2) of the Holding Company Act, 15 USCA § 79k(b)(2), requiring the dissolution of subholding companies which complicate the holding company system are not invalid on the ground that the Federal government has no power through any agency to decree the dissolution of a state-created corporation, as the orders do not purport of their own force to dissolve the corporations but, in effect, require the companies to submit plans for complete liquidation, the realization of which will be accomplished pursuant to §§ 11(d) or 11(e) of the act, 15 USCA § 79k(d), (e), and when this is done, dissolution will follow under state law as a matter of course, p. 38.

Intercorporate relations, § 5.2 — Constitutional limitations — Simplification of holding companies.

17. Section 11(b)(2) of the Holding Company Act, 15 USCA § 79k(b)(2), relating to simplification of holding company systems, rests upon the commerce power, not the bankruptcy power, and is not open to the objection that compulsory involuntary reorganization can take place only through the exercise of the bankruptcy power and that Congress cannot under the bankruptcy power compel the involuntary reorganization of solvent corporations, p. 39.

Constitutional law, § 15 —Deprivation of property — Curtailment of existing rights.

18. Not every curtailment or impairment of existing rights or every in-

cidental business loss resulting from regulatory legislation is a "taking" in the constitutional sense, p. 39.

Intercorporate relations, § 5.1 — Constitutional limitations — Orders requiring dissolution — Simplification of holding company system.

19. Section 11(b)(2) of the Holding Company Act, 15 USCA § 79k(b)(2), as applied in the exercise of the commerce power to require the dissolution of subholding companies unduly complicating a holding company system in violation of the standards of the Holding Company Act, does not constitute a deprivation of property without due process of law, p. 39.

Intercorporate relations, § 19.8 — Simplification of holding company system — Notice to security holders.

20. Proceedings before the Securities and Exchange Commission under § 11(b)(2) of the Holding Company Act, 15 USCA § 79k(b)(2), relating to simplification of holding company systems, do not violate the due process clause of the Constitution because the security holders are not given notice of the proceedings and are not permitted to vote on the changes to be effected, p. 41.

Intercorporate relations, § 5.1 — Constitutional requirements — Holding Company Act — Ex post facto law.

21. Section 11(b)(2) of the Holding Company Act, 15 USCA § 79k(b)(2), as applied to subholding companies found to complicate a holding company system, is not an "ex post facto law" in violation of the prohibition of Art. I, § 9 of the Constitution, as such law does not seek to punish anyone for past acts, lawful when done, but merely seeks for the future to eliminate factors in the structures of holding company systems likely to be productive of harm to interstate commerce, p. 42.

Intercorporate relations, § 5.1 — Constitutional requirements — Delegation of power — Holding Company Act.

22. Section 11(b)(2) of the Holding Company Act, 15 USCA § 79k(b)(2), relating to simplification of holding company systems, does not constitute an unconstitutional delegation by Congress of legislative power to the Securities and Exchange Commission because it fails to set forth adequate standards for the Commission's guidance, p. 42.

APPEARANCES: John F. MacLane, Frank A. Reid, and Arthur A. Ballantine, for American Power & Light Co., petitioner; Boykin C. Wright, R. Graham Heiner, Daniel James, Wright, Gordon, Zachry, Parlin & Cahill, Wallace P. Zachry, John F. MacLane, and Frank A. Reid, for Electric Power & Light Corporation, petitioner; John F. Davis, for respondent.

Before Magruder, Mahoney and Woodbury, JJ.

MAGRUDER, J.: These cases come here on petitions of American Power & Light Company (hereinafter referred to as American) and Electric Power & Light Corporation (hereinafter referred to as Electric), both companies being Maine subholding company subsidiaries of Electric Bond and Share Company (hereinafter referred to as Bond and Share), for review of orders of the Securities and Exchange Commission dated August 22, 1942, 46 PUR(NS) 321, requir-

ing the dissolution of the two petitioners. The petitions for review were filed under § 24(a) of the Public Utility Holding Company Act of 1935, 49 Stat 834, 15 USCA § 79x(a).

The orders were issued pursuant to § 11(b)(2) of the act, 15 USCA § 79k(b)(2), on the basis of a finding by the Commission "(1) that the corporate structures and continued existence of American and Electric unduly and unnecessarily complicate the structure of the Bond and Share system and unfairly and inequitably distribute voting power among the security holders of such system; (2) that to effectuate the statutory requirements it is necessary that American and Electric be dissolved." In the case of American the order under review provided, inter alia:

"It is *further ordered* pursuant to § 11(b)(2) of the Public Utility Holding Company Act of 1935 that the existence of American Power & Light Company shall be terminated and that said company shall be dissolved;

"It is *further ordered* that respondent American Power & Light Company and respondent Electric Bond and Share Company shall proceed with due diligence to submit to this Commission a plan or plans for the effectuation of this order, and shall take such other and further steps as may be necessary or appropriate to effectuate this order; . . ."

An order in corresponding terms was directed against Electric.

Relevant portions of § 11 of the Act are copied in the footnote.[1]

[1] "Section 11. (a) It shall be the duty of the Commission to examine the corporate structure of every registered holding company and subsidiary company thereof, the relationships among the companies in the holding company system of every such company and the character of the interests thereof and the properties owned or controlled thereby to determine the extent to which the corporate structure of such holding-company system and the companies therein may be simplified, unnecessary complexities therein eliminated, voting power fairly and equitably distributed among the holders of securities thereof, and the properties and business thereof confined to those necessary or appropriate to the operations of an integrated public-utility system.

"(b) It shall be the duty of the Commission, as soon as practicable after January 1, 1938:

"(1) To require by order, after notice and opportunity for hearing, that each registered holding company, and each subsidiary company thereof, shall take such action as the Commission shall find necessary to limit the operations of the holding-company system of which such company is a part to a single integrated public-utility system, and to such other businesses as are reasonably incidental, or economically necessary or appropriate to the operations of such integrated public-utility system: Provided, however, that the Commission shall permit a registered holding company to continue to control one or more additional integrated public-utility systems, if after notice and opportunity for hearing, it finds that—

"(A) Each of such additional systems cannot be operated as an independent system without the loss of substantial economies which can be secured by the retention of control by such holding company of such system;

"(B) All of such additional systems are located in one state, or in adjoining states, or in a contiguous foreign country; and

"(C) The continued combination of such systems under the control of such holding company is not so large (considering the state of the art and the area or region affected) as to impair the advantages of localized management, efficient operation, or the effectiveness of regulation. The Commission may permit as reasonably incidental, or economically necessary or appropriate to the operations of one or more integrated public-utility systems the retention of an interest in any business (other than the business of a public-utility company as such) which the Commission shall find necessary or appropriate in the public interest or for the protection of investors or consumers and not detrimental to the proper functioning of such system or systems.

"(2) To require by order, after notice and opportunity for hearing, that each registered holding company, and each subsidiary company thereof, shall take such steps as the Commission shall find necessary to ensure that the corporate structure or continued existence of any company in the holding com-

Section 11(b)(2) makes it the duty of the Commission, as soon as practicable after January 1, 1938:

"To require by order, after notice and opportunity for hearing, that each registered holding company, and each subsidiary company thereof, shall take such steps as the Commission shall find necessary to ensure that the corporate structure or continued existence

pany system does not unduly or unnecessarily complicate the structure, or unfairly or inequitably distribute voting power among security holders, of such holding-company system. In carrying out the provisions of this paragraph the Commission shall require each registered holding company (and any company in the same holding-company system with such holding company) to take such action as the Commission shall find necessary in order that such holding company shall cease to be a holding company with respect to each of its subsidiary companies which itself has a subsidiary company which is a holding company. Except for the purpose of fairly and equitably distributing voting power among the security holders of such company, nothing in this paragraph shall authorize the Commission to require any change in the corporate structure or existence of any company which is not a holding company, or of any company whose principal business is that of a public-utility company. The Commission may by order revoke or modify any order previously made under this subsection, if, after notice and opportunity for hearing, it finds that the conditions upon which the order was predicated do not exist. Any order made under this subsection shall be subject to judicial review as provided in § 24.

"(c) Any order under subsection (b) shall be complied with within one year from the date of such order; but the Commission shall, upon a showing (made before or after the entry of such order) that the applicant has been or will be unable in the exercise of due diligence to comply with such order within such time, extend such time for an additional period not exceeding one year if it finds such extension necessary or appropriate in the public interest or for the protection of investors or consumers.

"(d) The Commission may apply to a court, in accordance with the provisions of subsection (f) of § 18, to enforce compliance with any order issued under subsection (b). In any such proceeding, the court as a court of equity may, to such extent as it deems necessary for purposes of enforcement of such order, take exclusive jurisdiction and possession of the company or companies and the assets thereof, wherever located; and the court shall have jurisdiction, in any such proceeding, to appoint a trustee, and the court may constitute and appoint the Commission as sole trustee, to hold or administer under the direction of the court the assets so possessed. In any proceeding for the enforcement of an order of the Commission issued under subsection (b), the trustee with the approval of the court shall have power to dispose of any or all of such assets and, subject to such terms and conditions as the court may prescribe, may make such disposition in accordance with a fair and equitable reorganization plan which shall have been approved by the Commission after opportunity for hearing. Such reorganization plan may be proposed in the first instance by the Commission, or, subject to such rules and regulations as the Commission may deem necessary or appropriate in the public interest or for the protection of investors, by any person having a bona fide interest (as defined by the rules and regulations of the Commission) in the reorganization.

"(e) In accordance with such rules and regulations or order as the Commission may deem necessary or appropriate in the public interest or for the protection of investors or consumers, any registered holding company or any subsidiary company of a registered holding company may, at any time after January 1, 1936, submit a plan to the Commission for the divestment of control, securities, or other assets, or for other action by such company or any subsidiary company thereof for the purpose of enabling such company or any subsidiary company thereof to comply with the provisions of subsection (b). If, after notice and opportunity for hearing, the Commission shall find such plan, as submitted or as modified, necessary to effectuate the provisions of subsection (b) and fair and equitable to the persons affected by such plan, the Commission shall make an order approving such plan; and the Commission, at the request of the company, may apply to a court, in accordance with the provisions of subsection (f) of § 18, to enforce and carry out the terms and provisions of such plan. If, upon any such application, the court, after notice and opportunity for hearing, shall approve such plan as fair and equitable and as appropriate to effectuate the provisions of § 11, the court as a court of equity may, to such extent as it deems necessary for the purpose of carrying out the terms and provisions of such plan, take exclusive jurisdiction and possession of the company or companies and the assets thereof, wherever located; and the court shall have jurisdiction to appoint a trustee, and the court may constitute and appoint the Commission as sole trustee, to hold or administer, under the direction of the court and in accordance with the plan theretofore approved by the court and the Commission, the assets so possessed."

of any company in the holding-company system does not unduly or unnecessarily complicate the structure, or unfairly or inequitably distribute voting power among security holders, of such holding-company system."

Acting under that authority the Commission instituted the present proceeding on May 9, 1940, by the entry of notice and order for hearing, naming as respondents Electric Bond and Share, several subholding company subsidiaries of Electric Bond and Share (including the two petitioners), and Ebasco Services, Inc. The order specified that the hearing was to determine whether it was necessary to continue the existence of or modify the corporate structure of, or redistribute the voting power among security holders of, Bond and Share or any of the other respondents and "what further action, if any, is necessary and shall be required to be taken by the respondents herein, or any of them, to ensure that the corporate structure or continued existence of any of the respondents herein does not unduly or unnecessarily complicate the structure, or unfairly or inequitably distribute voting power among security holders, of the holding company system of Electric Bond and Share Company." On June 7, 1940, 7 SEC 391, the Commission entered an order that the hearing "shall be limited initially to the issue of whether it is necessary to discontinue the existence of American Power & Light Company [or] Electric Power & Light Corporation . . . in order to insure that the structure of the holding company system of Electric Bond and Share Company shall not be unduly or unnecessarily complicated and that voting power shall not be unfairly or inequitably distributed among security holders of such system." [2]

The hearing opened on June 18, 1940, before an examiner, and extended over a period of two years. A voluminous record was made, comprising over 18,000 pages of testimony and more than 1,500 exhibits.

Copies of the Commission's proposed findings, opinion, and order were exhibited to counsel for American and Electric, who thereupon entered into stipulations, reading, in part, as follows:

"And a copy of Commission's proposed findings, opinion and order having been exhibited to counsel for American [Electric];

"And it appearing therefrom that the objections made by respondent American [Electric] in motions and exceptions, or otherwise in the record, have been fully presented to and urged before the Commission, and are ruled upon in said findings, opinion and order;

"It is hereby stipulated that respondent American [Electric] through its counsel hereby waives the filing of request for findings, further exceptions to the findings and opinion of the Commission, the filing of briefs and oral argument, but reserves all

[2] This order did not, as petitioners contend, amount to a predetermination by the Commission that elimination of the subholding companies would necessarily have to be the remedy to be applied if it should be found that undue complexity and inequitable distribution of voting power existed in the holding company system. Under the issue as framed it was open to petitioners to make a showing that some other remedy was more appropriate, and that dissolution of American and Electric was not necessary to ensure compliance with § 11(b)(2).

legal and constitutional rights, including its right to full judicial review of the said findings, opinion and order.

"Subject to the foregoing reservations of rights, it is stipulated that the Commission may proceed to enter its findings, opinion, and order without further formality."

Thereupon, the Commission, on August 22, 1942, 46 PUR(NS) 321, formally issued its findings, opinion, and orders. Petitions for rehearing were filed on August 27th and denied the next day.

Petitioners seek to raise before us a great many issues, which fall into four basic categories: (1) those raising procedural objections to the orders; (2) those challenging the sufficiency of the evidence to sustain the Commission's ultimate findings; (3) those asserting that the orders are arbitrary and capricious, and (4) those challenging the constitutionality of § 11(b)(2) of the act. Some of these issues are not properly before us; others have been passed upon by decisions in other circuits and do not need extended discussion.

[1, 2] Section 24(a) of the act provides that:

"No objection to the order of the Commission shall be considered by the court unless such objection shall have been urged before the Commission or unless there were reasonable grounds for faliure so to do."

Observing this limitation upon our power of review, we must decline to consider the following objection, which the petitioners have presented here but did not urge before the Commission: that § 11(b)(2) does not as a matter of statutory interpretation authorize the dissolution of subholding companies as one method of bringing a holding company system into compliance with that subsection. Marshall Field & Co. v. National Labor Relations Board (1943) 318 US 253, 87 L ed 744, 63 S Ct 585; Pacific Gas & E. Co. v. Securities and Exchange Commission (1942) 44 PUR(NS) 97, 127 F (2d) 378, 386; Todd v. Securities and Exchange Commission (1943) — PUR(NS) —, 137 F(2d) 475. The last two cases just cited held that § 24 (a) would preclude judicial review even of questions as to the constitutionality of the act, if such issues were not raised before the Commission. There may be some doubt whether this is so; since an administrative agency necessarily assumes the constitutionality of the statute under which it operates, it might perhaps be held that this constitutes "reasonable grounds" for the failure to raise constitutional issues before the Commission. However that may be, there can be no doubt that under § 24(a) petitioners were obliged to raise before the Commission issues as to the Commission's statutory authority to issue the contemplated orders. We do not find that the Commission in the course of the proceedings did anything which might be held to constitute a "waiver" of this requirement. The stipulation filed by petitioners just before the formal entry of the orders reserved in general terms all legal and constitutional rights, including the "right to full judicial review of the said findings, opinion, and order." This can only mean judicial review according to law. It cannot confer upon us power to review questions which § 24(a)

forbids us to review because they were not raised before the Commission.

For the same reason, the following objections, which were not made before the Commission, cannot be considered by us: (1) that petitioners are legally incapable of complying with the order of dissolution because dissolution can be effectuated only by a vote of the stockholders in pursuance of procedure prescribed by state law; (2) that the orders are not in accordance with § 11(b)(2) in that they fail to prescribe the "steps" which petitioners must take to effectuate compliance with the statutory requirements; (3) that the orders operate in effect to deprive petitioners of the benefit of the one-year period granted by § 11(c) within which to comply with the orders.

[3] Petitioners refer to the direction in § 11(b)(2) that the Commission shall proceed thereunder "as soon as practicable after January 1, 1938," and object that the orders should not have been made since it is not "practicable" at this time "to require the acts provided for therein, in view of the effect of the present emergency created by the war, including the depressed condition of financial markets and the present uncertainties and difficulties of our national economy." This objection is sufficiently answered in Todd v. Securities and Exchange Commission, *supra,* 137 F(2d) at p. 479:

"Petitioner urges that the issuance of the order at the present time is 'impracticable,' due to war conditions and their effect upon the business of the system. But the statute, while providing due protection for investors, has not made convenience for the holding company the test of statutory practicability. The term 'as soon as practicable' clearly means that the action contemplated by the statute shall be taken 'as soon as practicable' for the Commission."

Section 11(a) contemplates that the Commission shall make studies of each registered holding company and subsidiary to determine the extent to which the corporate structure of such holding company system may be simplified, unnecessary complexities therein eliminated, voting power fairly and equitably distributed and the properties and business thereof confined to those necessary or appropriate to the operations of an integrated public utility system. It is then the Commission's duty "as soon as practicable" to proceed under § 11(b). It is fully apparent from the record that the Commission made a preliminary examination of the Bond and Share system. The Commission's notice and order for hearing in the present proceedings stated at the outset:

"The Commission having examined the corporate structure of Electric Bond and Share Company, a registered holding company, and its subsidiary companies, the relationships among the companies in the holding company system of said Electric Bond and Share Company, the character of the interests thereof and the properties owned or controlled thereby, and the Commission having reasonable grounds to believe that . . . ." (Then follows a detailed description of the history, structure, and property of the system and an assertion of the Commission's belief that the

system is not in compliance with the requirements of § 11(b)(2).)

[**4, 5**] It is argued that the Commission was required to institute and complete proceedings under § 11(b)(1) looking toward the integration of the operating subsidiaries before it was authorized to enter an order in § 11(b)(2) proceedings. This argument was rejected, and, we think, correctly, in Commonwealth & Southern Corp. v. Securities and Exchange Commission (1943) 48 PUR(NS) 72, 83, 134 F(2d) 747, 754, where the court said:

"The final assignment of unfairness is based upon the fact, that the Commission failed to consider the effect of any orders which may hereafter be made by it in the proceedings under § 11(b)(1). There is, however, no direction in the act as to whether proceedings under § 11(b)(1) or under § 11(b)(2) should be first determined. The order of procedure is left entirely to the discretion of the Commission. We may not interfere with the exercise of its discretion in this case."

A similar objection is based upon the refusal of the Commission to grant motions by the petitioners, made in December, 1941, to consolidate the hearings on plans submitted by the petitioners under § 11(e) with the present § 11(b)(2) proceedings. On July 23, 1941, American had filed with the Commission an application for approval by the Commission of a detailed plan of reorganization purporting to bring the company into compliance with the requirements both of §§ 11(b)(1) and 11(b)(2) of the act. Electric had filed a similar application on December 3, 1941. In explaining its reasons for denying the motions to consolidate, the Commission stated that hearings on the § 11(e) plans would unduly prolong the § 11(b)(2) proceedings and it pointed out certain defects appearing on the face of the plans which, in the judgment of the Commission, would render them wholly inadequate to accomplish their purported purpose of meeting the statutory requirements. Further, the Commission stated:

"We regard as wholly untenable respondent's contention that in carrying out our duties under § 11 we cannot find 'necessary' a course of action for which some alternative may be present, since such a construction would lead to the result that we should be rendered impotent to order *any* action where several courses of action appeared available to achieve the statutory objectives. On the basis both of plain logic and the basic principles of statutory construction, we deem it indisputable that the steps or action we must find 'necessary' within the meaning of § 11 are such as seem to us designed to *ensure* effectuation of the provisions of the section *most effectively and promptly.*" (46 PUR(NS) at p. 387.)

We find nothing in § 11 which would require the Commission, before issuing any order under § 11(b)(2), to hold a hearing on applications tardily filed by the companies under § 11(e). Under the circumstances we hold that the Commission did not abuse its discretion in denying the motions to consolidate. And see Commonwealth & Southern Corp. v. Securities and Exchange Commission, *supra*, 134 F(2d) at p. 754.

The Commission pointed out that its orders under § 11(b)(2) did not exclude the possibility that American and Electric might actually proceed to reconstitute themselves and their systems in such manner that dissolution would no longer be necessary to "ensure" compliance with the statutory requirements. In that event the Commission is empowered by § 11(b) to "revoke or modify any order previously made under this subsection, if, after notice and opportunity for hearing, it finds that the conditions upon which the order was predicated do not exist."

We proceed to review, at not too great length, the ultimate statutory findings by the Commission upon which its orders were predicated.

The Commission sets forth with a wealth of detail the history of the organization, development, capitalization, and structure of the Bond and Share system, and the rôle of the present petitioners therein. The subsidiary facts are not really in dispute, though petitioners challenge certain of the Commission's inferences and conclusions therefrom.

The Bond and Share system is a pyramid-like structure of which Bond and Share itself constitutes the apex, a number of subholding companies (including American and Electric) form an intermediate tier, and over two hundred direct and indirect subsidiaries of the latter form the base. In respect of capitalization and assets, number of customers and geographical area served, and quantity of electricity generated and gas sold, the Bond and Share system constitutes the largest single public utility holding company system registered under the act.

Bond and Share owns securities in American representing 20.7 per cent of the total voting power. It owns securities in Electric representing 46.8 per cent of the total voting power. Quite apart from the statutory presumption in §§ 2(a)(7) and 2(a)(8), 15 USCA § 79b(a)(7), (8), it is clear and undisputed that Bond and Share controls American and Electric, and that such control pervades the whole of these subholding company systems in a most comprehensive manner.

The general pattern followed by Bond and Share in developing its system through the instrumentality of subholding companies is described by the Commission, with much supporting detail, as follows:

" . . . assets were placed on the books of the subholding companies at sums considerably in excess of their cost to Bond and Share and its associates in the particular venture (the 'syndicate'); the subholding company would then issue to Bond and Share and associates senior securities (either notes or preferred stock) in a face amount more than sufficient to cover the cost of the assets turned over to the subholding company, and would also issue substantial amounts of common stock (having a majority of total voting power) against the company's inflated investment account. Bond and Share and associates would sell to the public the senior securities plus a bonus of common stock, for the approximate face amount of the senior security, thereby recouping all cash outlays; the promoters would then be left with

substantial blocks of common stock at no cash cost (sometimes indeed with a cash profit) which they would divide among themselves, the lion's share always going to Bond and Share as 'manager' and promoter of the venture. Thus, Bond and Share would emerge with a substantial block of voting stock at no cost, and complete control of the new corporation (and its subsidiaries) assured through the concentrated voting strength of its common stock holdings and the execution of Bond and Share's standard 'service contract' whereby Bond and Share employees 'officered' the company, formed more than a majority of its board, and 'took over the management of the company and its subsidiaries.'

"As a corollary to this method of financing the subholding companies, there also invariably resulted a serious inflation in the accounts of the operating company subsidiaries which were set up. Since the assets received at organization by the subholding companies were generally entered in their book accounts at inflated figures, they were transferred by the subholding companies to the operating companies at sums embodying at least an equivalent amount of inflation and sometimes a greatly increased amount. In this way there was passed over to the consumer the burden of supporting the watered capitalization of both operating company and the subholding company, while the public investors in the securities of the operating company and the subholding company who may have purchased their securities in reliance on balance sheets containing serious inflation were not informed thereof." (46 PUR(NS) at pp. 349, 350.)

American was organized by Bond and Share in 1909. After reciting the organization steps and methods of financing, the Commission concluded:

"It is thus apparent that Bond and Share had succeeded in realizing for itself complete working control of the new company and better than a 20 per cent equity in it, after recovering every dollar of its investment in the securities transferred to American, plus a cash profit of approximately $120,000. Otherwise stated, Bond and Share had sold out an 80 per cent interest in the aforementioned securities, recovering thereby its entire cost plus a substantial profit without in any way parting with control of such securities or of the properties which they represented. These facts obviously afford some illumination as to the meaning of Bond and Share's executive committee when it authorized the formation of American 'to minimize the risks and commitments' of Bond and Share.

"The obverse side of the coin must not be overlooked. American had issued $8,000,000 par value of its own securities to acquire $500,000 cash and securities which had recently cost Bond and Share less than $1,700,000. The cash paid over to Bond and Share for the securities and the profits realized by Bond and Share were furnished by the public which purchased American's securities. Nevertheless, control of the company rested firmly in Bond and Share's possession." (46 PUR(NS) at p. 343.)

In the years following, American enormously expanded its capitalization and holdings. As its succeeding is-

sues of preferred stock to the public diluted somewhat the voting control of Bond and Share, such control was reinforced from time to time by various means, including common stock split-ups,[3] and the issuance of additional common stock as dividends on American's outstanding common stock.

Electric was organized by Bond and Share in 1925. The Commission found:

"The outcome for Bond and Share of the organization and financing of Electric was successful beyond all previous similar ventures. For its holdings of Utah Securities Corporation common stock (56,193 shares) representing a cost to Bond and Share of $618,123, it had received $561,930 in cash and 224,772 shares of Electric common. For its basket of other securities transferred to Electric having a cash cost of $19,390,385 it received the equivalent of $25,889,076 in cash plus 50,000 shares of common stock and 353,408 option warrants to buy additional common at $25 per share. Through the various transactions in connection with Electric's organization, Bond and Share acquired an additional 23,569 shares of common at a cost of $36,216 or $1.53 per share. In total, Bond and Share emerged with 298,341 shares of common and 353,408 option warrants at no cost, 9,480 shares of second preferred stock at a cost of $854,904, and a net cash profit of approximately $6,500,000 on the securities surrendered to Electric, most of which had been held less than two years.

"Not only did Bond and Share acquire its entire initial common stock investment in Electric at a cost of approximately minus $6,500,000, but in customary fashion it also emerged with complete control of the new company." (46 PUR(NS) at pp. 353, 354.)

Though the capitalization of Electric in the succeeding years was, as in the case of American, greatly increased, Bond and Share maintained control throughout.

Arrearages of cumulative dividends on the preferred stocks of American and Electric have mounted steadily, year by year, since 1932. As of December 31, 1941, such arrearages on the two classes of preferred stock in American amounted to $35,114,788, representing more than three and a half years' requirements on each class. As of the same date, the arrearages on Electric's preferred stock amounted to $50,889,325, representing more than nine years' requirements on its first preferred stock and over ten years' requirements on its second preferred. Notwithstanding this, the Commission pointed out that Bond and Share has continued in full control of petitioners by virtue of the absence from petitioners' charters and bylaws of any provision for increased voting power or other protective features for the preferred stocks when dividends are in arrears.[4]

[3] The Commission cites similar instances of common stock split-ups in operating companies to reinforce the voting control of the subholding companies over their subsidiaries.

[4] The Commission further pointed out that the charters contained express waivers of stockholders' preëmptive rights and gave the directors power to authorize the issuance of additional stock and perpetual option warrants to such persons and at such prices as they deemed fit.

Up until 1935 American organizationally was "scarcely more than a set of books in Bond and Share's office." The same was true of Electric. All officers of petitioners were employees of Bond and Share and paid exclusively by it; neither petitioner had any employees of its own. All corporate activities performed for or in the name of petitioners were performed by employees of Bond and Share.

[6] In November, 1935, shortly before the registration provisions of the Public Utility Holding Company Act went into effect, certain organizational changes were made, designed to give petitioners the semblance of being independent entities. In the case of American, seventeen employees of Bond and Share became, formally, officers and employees of American, and were removed, together with American's books and records, into a separate suite of rooms in the Bond and Share office building. Similarly, a group of fourteen employees of Bond and Share became, formally, officers and employees of Electric and were moved, together with Electric's books and records, into a separate suite of offices adjoining those of American. The formal interlocking which had theretofore existed between the boards of directors of Bond and Share and petitioners and their subsidiaries was substantially terminated. At the same time Bond and Share organized Ebasco Services, Inc., a wholly owned subsidiary, to which was transferred the entire service section of Bond and Share. The subsidiaries of petitioners duly entered into service contracts with Ebasco and have continued to operate under such arrangements up to the present time.

We think the Commission was justified in finding, as it did, that these changes were superficial, and in no way cured the vulnerability of petitioners under § 11(b)(2) of the act. The personnel transferred to American and Electric were sufficient merely to perform the routine activities incident to the functioning of the subholding companies as corporate owners of securities. Petitioners were not endowed with the function of servicing their operating subsidiaries. The Commission added: "The record further establishes that there is close and constant contact and coördination between the personnel of the subholding company respondents and the personnel of Bond and Share and Ebasco and that, in effect, the personnel of the subholding companies have functioned since November, 21, 1935, as subsidiary and complementary organizations of Bond and Share, possessed of substantially the same outlook, objectives, and loyalties as they had prior to November, 1935." (46 PUR(NS) at p. 364.)

In its findings on the issue of undue complexity, the Commission was guided by the detailed statements of policy expressed by Congress in § 1 of the act. 49 Stat 803, 804.

[7] Petitioners have not in the past served any functional purpose in the management of their operating subsidiaries. The subsidiaries of American and Electric were grouped together for purposes of management on geographical lines "irrespective of holding company affiliation." The actual management prior to 1935 was performed by Bond and Share's own

service section, and after 1935 by Ebasco, Bond and Share's wholly owned subsidiary.

To petitioners' claim that they have served a useful purpose in assembling "scattered properties into compact and integrated companies" the Commission responded that the acquisition and combination of operating properties has really been done by Bond and Share, and that ownership has nominally been placed in the subholding companies "for the purpose of getting public investors to provide the money to: (1) reimburse Bond and Share, with a profit, for its entire investment in groups of assets, while leaving Bond and Share in undisturbed dominion of these assets and with claims to a portion of their earnings; and (2) acquire control of the greatest possible number of additional properties to which Bond and Share's dominion would extend." (46 PUR (NS) at p. 366.)

Mr. S. R. Inch, then president of Bond and Share, testifying before the House Committee on Interstate and Foreign Commerce, while the act was in process of passage, stated that the subholding companies "serve no functions except the very important ones of providing the equity money for, and the cash needed from time to time by their own operating subsidiaries."

The Commission, however, pointed out that "no substantial amount of risk capital was furnished to the operating companies by either the subholding companies or by Bond and Share"; that the investments which the subholding companies made in the securities of the operating companies "were made principally in the process of *purchasing control* of the operating companies from those in whom this control rested, a process which contributed nothing to the treasuries of the operating companies"; that it has been "the public investors in the securities of the subsidiaries of American and Electric who have supplied virtually all the capital that has gone into the development of such subsidiaries subsequent to their acquisition by American and Electric, just as it had been the public investors rather than Bond and Share who supplied to American and Electric the capital which enabled them to acquire such control." With respect to the claim that the subholding companies have conferred benefit upon their subsidiaries by supplying them with short-term capital in the form of loans, the Commission stated that "these loans do not impress us as having conferred any noteworthy benefit on the operating companies." Further, it found that since 1935 "American and Electric have made loans to subsidiaries in perhaps a dozen instances, the amounts involved being relatively small and in most cases for very short periods. Since the subholding companies charged from 3 to 6 per cent on loans which almost certainly could have been obtained by the subsidiaries from banks for less, it is clear that the transactions were designed to benefit the subholding companies rather than the subsidiaries and were actually at the expense of the subsidiaries." (46 PUR (NS) at pp. 366–371.) Furthermore, it is not apparent why such loans could not just as readily have been made by Bond and Share itself.

In commenting on the impression of simplicity and symmetry derived

from a glance at the corporate chart of the Bond and Share system, the Commission pointed out that "each of the major corporate units at the base of the system itself has a complex capital structure in which the principles of pyramiding and leverage are employed in very full measure. Upon each such corporate structure there is superimposed a holding company with a complex structure of its own, and in turn, upon this holding company there is superimposed still another holding company having its own unduly complex structure, a high degree of pyramiding being employed in process of superimposition." Although ostensibly the system is comprised of only three levels, nevertheless, the Commission stated, "income derived from the basic functions of the system, namely the generation and sale of electric energy and gas, cannot reach the common stockholders of the top holding company until it has been filtered through *seven to fourteen* classes of securities having prior claims to such earnings." The complicating effect of this structure is described by the Commission as follows:

"This mutiplicity of steps obviously in itself creates a formidable problem for an investor in the securities of Bond and Share or the subholding companies seeking to appraise the earning power of his securities. The problem is, of course, greatly intensified by the fact that the system income does not progress in a straightforward continuous line from step to step until the top level is reached, but is drawn off and co-mingled at the level of the subholding companies with income from all the subsidiaries of each of the subholding companies, and there diverted to meeting the requirements of the security structures of the subholding companies. In the case of three of the five subholding companies (American, Electric and American & Foreign Power Company, Inc.), the corporate structures are so ill-balanced that for the last ten years dividends on preferred stocks have accumulated each year, and these accumulated arrearages now constitute mountainous barriers athwart the flow of system income to the top level.

"Furthermore, the problem of income appraisal is acutely complicated when viewed from its dynamic rather than its static aspects, in appraising the effects of changes and shifts of income. Where the investor is required, as is here the case, to evaluate the future earnings prospects of securities resting near the top of a pyramided structure, he is confronted with the almost impossible task of measuring the magnified impact of income changes at the lower levels of the structure upon those higher in the pyramid resulting from the sharp leverage factor of hyper-attenuated equities.

"All the foregoing factors, of course, come into play as well in the appraisal of the asset value of the securities of Bond and Share and the subholding companies and serve to complicate the problems of appraisal beyond the limits of even the sophisticated investor." (46 PUR(NS) at pp. 380, 381.)

We cannot say that the Commission was unwarranted in concluding that the corporate structure and continued existence of American and Electric unduly and unnecessarily

complicate the holding company system of Bond and Share.

[8, 9] Nor can we say that the Commission was unwarranted in finding that the capital structure and continued existence of petitioners unfairly and inequitably distribute voting power among security holders of the Bond and Share system. The Commission, in reaching this conclusion, recited the facts in great detail, relying primarily (1) upon a historical survey of the steps and methods by which the Bond and Share system was put together and developed, with attention to the actual cost to Bond and Share and petitioners of investments whereby control of vast properties was secured, and (2) upon a consideration of the investments of Bond and Share and petitioners compared with the total capitalization of petitioners' subsidiaries, as appears on the companies' own books.

As of December 31, 1941, the total capitalization (including long-term debt and surplus) of American's subsidiaries amounted to $729,143,155. Bond and Share controls this immense pool of capital through ownership of common and preferred stock of American representing, on the books, an interest of only 3.42 per cent in the total capitalization of American's subsidiaries. As of December 31, 1941, the total capitalization (including long-term debt and surplus) of Electric's subsidiaries was $653,981,-088. Bond and Share controls this immense pool of capital through ownership of common and preferred stock of Electric representing, on the books, an interest of only 8.72 per cent in the total capitalization of Electric's subsidiaries. The Commission indicated that the disproportion would be much greater if adjustment were made for write-ups and insufficient depreciation reserves.

Petitioners contend that for purposes of this comparison the bonded indebtedness should be excluded from the capitalization totals but the Commission was not obliged to disregard this element in determining whether holding company control "is exerted through disproportionately small investment," § 1(b)(3), 15 USCA § 79a(b)(3), a situation which Congress has found to be frequently productive of various evils.

[10] At the hearing before the examiner American offered certain valuation testimony purporting to show the present valuation of assets and securities. The examiner excluded such evidence as irrelevant to the pending issues. In its final findings and opinion the Commission sustained this ruling of the examiner on the ground that valuation testimony is inadmissible in an 11(b)(2) proceeding of this kind. Petitioners claim that this ruling by the Commission was error on the ground that the Commission's ultimate findings and orders were based in part upon findings by the Commission as to present valuation. We think we should indulge the presumption that the Commission and its lawyers would know enough not to commit the egregious blunder of (1) making a ruling that petitioners could not be allowed to introduce valuation evidence, and (2) in the same document making ultimate findings predicated in part upon subsidiary findings as to valuation. This consideration would weigh with us in resolving any possible ambiguities that

might exist in the Commissions' findings. However, from a careful reading of the findings we do not believe that they rest upon subsidiary findings as to present valuations, or that valuation evidence, if introduced, would have made any difference in the Commission's findings and conclusions on the pending issues. A similar exclusion by the Commission of valuation evidence was sustained in Commonwealth & Southern Corp. v. Securities and Exchange Commission (1943) 48 PUR(NS) 72, 134 F(2d) 747, 754. Such valuation evidence may become relevant at a later stage, in proceedings under § 11(d) or § 11 (e).

[11–13] Accepting, as we have done, the Commission's ultimate statutory finding "that the corporate structures and continued existence of American and Electric unduly and unnecessarily complicate the holding company system of Bond and Share and unfairly and inequitably distribute voting power among the security holders of such system" (46 PUR(NS) at p. 385), we next have to consider the appropriateness of the remedy selected by the Commission. The companies must take such steps as the *Commission* shall find necessary to *ensure* that the requirements of § 11 (b)(2) are met as soon as practicable. It is not enough that some other remedy, suggested by petitioners, might accomplish the statutory purposes in whole or in part. The choice of remedy is a matter confided primarily to the expert judgment of the Commission, and in this field the courts are quite properly loath to set up their own judgment in opposition to that of the administrative tribunal. Phelps Dodge Corp. v. National Labor Relations Board (1941) 313 US 177, 194, 85 L ed 1271, 61 S Ct 845, 133 ALR 1217. In Herzfeld v. Federal Trade Commission (1944) 140 F (2d) 207, 209, Learned Hand, C. J., pointed out that "the Supreme Court has as such circumscribed our powers to review the decisions of administrative tribunals in point of remedy, as they have always been circumscribed in the review of facts. Such tribunals possess competence in their special fields which forbid us to disturb the measure of relief which they think necessary. In striking that balance between the conflicting interests involved which the remedy measures, they are for all practical purposes supreme."

Here the Commission has found "that to effectuate the statutory requirements it is necessary that American and Electric be dissolved." (46 PUR(NS) at p. 392.)[5] There can be no doubt that the remedy of dissolution will *ensure* that the corporate structures and continued existence of petitioners will no longer unduly complicate the structure of the Bond and Share system nor unfairly distribute voting power among the security holders of such system. We are unable to say that this choice of remedy is so lacking in rational basis

[5] Counsel for the Commission call our attention to the fact, for what it is worth, that in their answer filed in Electric Bond and Share Co v. Securities and Exchange Commission (1938) 303 US 419, 82 L ed 936, 22 PUR (NS) 465, 58 S Ct 678, 115 ALR 105, the present petitioners alleged that enforcement of § 11 would "leave them with no alternative but to dissolve, go out of business, and sacrifice their investments for anything that they may bring."

as to amount to an arbitrary and capricious act outside the broad scope of discretion confided to the Commission.

The present litigation is but part of a larger proceeding instituted by the Commission to deal in accordance with the statutory mandates with the whole Electric Bond and Share system and all of its component parts. We are not in a position now to size up the whole broad situation, nor do we know what the Commission may have in mind to do with the many Bond and Share problems which will remain after the present cases, dealing with two of Bond and Share's subholding companies, are disposed of.

Petitioners argue, somewhat plausibly, that if their corporate structure and continued existence have the found effects upon the Bond and Share system, the statutory requirements could have been met by simply removing them from such system without ordering their dissolution; and that this could be accomplished by an order directing Bond and Share, the top holding company, to divest itself of its control over the intermediate holding companies. But, as we have said, the Bond and Share system, with which the Commission is dealing in its entirety in the proceeding pending before it embraces all of its component parts, including petitioners and their subsidiaries. The severance of the top holding company would minimize somewhat the complexities, but would leave untouched certain complexities, and perhaps some features of inequitable distribution of voting power, in the American and Electric components.

The Commission is not obliged, if there is a possible choice of remedy, to select the less drastic remedy which leaves the subholding companies in existence; indeed, § 1(c) of the act declares the policy to be "to provide as soon as practicable for the elimination of public-utility holding companies except as otherwise expressly provided in this title." The fact that petitioners have themselves the technical status of registered holding companies does not guarantee their survival. Running through petitioners' briefs is the thought that the guilt, if any, is that of Bond and Share, and that it is unreasonable to destroy the innocent victims for the sins of the real culprit. But American and Electric have no independent standing as innocent victims. Since the time of their creation, as found by the Commission, they have been merely the creatures and instrumentalities of Bond and Share, utilized as pyramiding and leverage devices for the accomplishment of purposes inimical to the policy of the act.[6]

The Commission considered the suggestion that petitioners might be left in existence to perform the function of holding together integrated public utility systems as contemplated by § 11(b)(1), and observed: "There is nothing about the subholding companies which makes them vehicles for holding together a single integrated system in any respect superior to any other corporate entity, and in fact it would seem that a com-

[6] Though the orders under review were directed to Bond and Share, as well as to American and Electric, Bond and Share filed no petition for review, being apparently confident that its interests would be fully represented by the present petitioners.

pany specially formed for this purpose, with appropriate domicile and a charter and by-laws free from the complexities found in those of American and Electric, would be far preferable." (46 PUR(NS) at p. 391.) As we understand the orders under review, it is open to each of the petitioners, in submitting plans for effectuation of the orders, to propose a reorganization along these lines looking toward the creation of a new holding company.

Petitioners raise a number of constitutional points, which are now in order to be considered.

[**14, 15**] It is contended that § 11 is beyond the power of Congress under the commerce clause. However, § 11(b)(1) was held valid against such attack in North American Co. v. Securities and Exchange Commission (1943) 47 PUR(NS) 6, 133 F(2d) 148, 153, cert. granted (1943) 318 US 750, 87 L ed 1126, 63 S Ct 764. And § 11(b)(2) was upheld against such attack in Commonwealth & Southern Corp. v. Securities and Exchange Commission, *supra,* 134 F(2d) at p. 752, followed in Central & S. W. Utilities Co. v. Securities and Exchange Commission (1943) 78 US App DC —, 50 PUR (NS) 293, 136 F(2d) 273. To the same effect see In Re Community Power & Light Co. (1940) 35 PUR (NS) 135, 33 F Supp 901. Petitioners have not sustained the rather heavy burden, which is theirs, of persuading us to create a conflict with these cases by holding otherwise. Resolving in favor of constitutionality any doubts that might exist, we think it sufficiently appears from the act as a whole that § 11 is tied in with the commerce power.

True enough, § 11(b)(2) contains no reference to interstate commerce. It applies to "each registered holding company, and each subsidiary company thereof." Petitioners argue that the act is defective in that it contains no provision that the Commission must find "that the particular companies to which it applies § 11 (b)(2) are actually engaged in, or do affect, interstate commerce, and that the changes in distribution of voting power and corporate structure directed by the SEC affect interstate commerce."

Bond and Share and petitioners were obliged to register under § 5, 15 USCA § 79e, because otherwise, as provided in § 4(a), 15 USCA § 79d (a), they could not have continued to use the instrumentalities of interstate commerce directly or through their subsidiaries in the operation of their business. Electric Bond & Share Co. v. Securities and Exchange Commission (1938) 303 US 419, 82 L ed 936, 22 PUR(NS) 465, 58 S Ct 678, 115 ALR 105. As Judge Swan said in North American Co. v. Securities and Exchange Commission, *supra,* 133 F(2d) at p. 153: "Section 3 provides administrative procedure by which a holding company can obtain exemption from any provision of the act, if it and its subsidiaries are predominantly intrastate in character." The provision of the act referred to is as follows:

"Section 3. (a) The Commission, by rules and regulations upon its own motion, or by order upon application, shall exempt any holding company and every subsidiary company thereof as

such, from any provision or provisions of this title, unless and except in so far as it finds the exemption detrimental to the public interest or the interest of investors or consumers, if—

"(1) such holding company, and every subsidiary company thereof which is a public-utility company from which such holding company derives directly or indirectly, any material part of its income, are predominantly intrastate in character and carry on their business substantially in a single state in which such holding company and every such subsidiary company thereof are organized; . . ."

In interpreting and applying its power of exemption under this section, the Commission has been guided by the provision in § 1(c), reading: " . . . it is hereby declared to be the policy of this title, in accordance with which policy all the provisions of this title shall be interpreted, to meet the problems and eliminate the evils as enumerated in this section, connected with public utility holding companies which are engaged in interstate commerce or in activities which directly affect or burden interstate commerce."

Thus it has ruled that an exemption otherwise allowable should not be denied under the "unless and except" clause of § 3(a), unless the exemption would be detrimental to the interests of the public or of investors or consumers "by reason of any activities of the applicant or of any such subsidiary company in interstate commerce, or directly affecting or burdening interstate commerce. Re Long Island Lighting Co. (1936) 1 SEC 345, 346. This interpretation by the Commission is entitled to great weight and should be accepted by the courts. United States v. American Trucking Assos. (1940) 310 US 534, 549, 84 L ed 1345, 35 PUR(NS) 486, 60 S Ct 1059; Securities and Exchange Commission v. Associated Gas & E. Co. (1938) 26 PUR(NS) 399, 99 F(2d) 795, 798.

Furthermore, whatever might be the objection to applying § 11(b) to a holding company whose activities are less clearly related to interstate commerce, there is no doubt that the present petitioners, and their parent company "are engaged in activities which bring them within the ambit of congressional authority." Electric Bond & Share Co. v. Securities and Exchange Commission, *supra,* 303 US at p. 431. Petitioners "are engaged in transactions of interstate commerce. That they conduct such transactions through the instrumentality of subsidiaries cannot avail to remove them from the reach of the Federal power." 303 US at p. 440. Petitioners occupy a "highly important relation to interstate commerce and the national economy, . . ." 303 US at p. 441. Under § 32, 15 USCA § 79z-6, if the application of § 11 to any person or circumstances should be held invalid, the application of such section "to persons or circumstances other than those as to which it is held invalid shall not be affected thereby."

It was not necessary for the Commission to find that the existing complexities of structure and inequitable distribution of voting power were adversely affecting interstate commerce in this particular case. Congress has found in § 1 that these evils often materially affect the interstate commerce in which the holding com-

panies engage. There was ample basis for such finding in the reports of the Federal Trade Commission and of the committees of Congress which formed the basis of the legislation. Cf. Ecker v. Western P. R. Corp. (1943) 318 US 448, 474, 87 L ed 892, 63 S Ct 692. The following statement in the opinion by Judge Maris in Commonwealth & Southern Corp. v. Securities and Exchange Commission (1943) 48 PUR(NS) 72, 81, 134 F(2d) 747, 753, is pertinent at this point:

"Congress having thus incorporated its conclusion in the act itself it is not for this court to make an independent study of the economic data upon which the legislative conclusion was based. In view of its factual conclusion Congress was acting well within its constitutional power to strike at the evil by any means which seemed to it to be appropriate and desirable. It follows, likewise, that it is not open for us to consider whether the complications of corporate structure which the Commission found to exist in Commonwealth's Case do actually adversely affect interstate commerce. Since Congress has found that such complications have adversely affected interstate commerce in many cases it is clearly within its power of policing that commerce to require the elimination of such complications in all cases."

The concluding proposition from the opinion just quoted is well supported by decisions in analgous situations. See Stafford v. Wallace (1922) 258 US 495, 520, 66 L ed 735, 42 S Ct 397; Chicago Board of Trade v. Olsen (1923) 262 US 1, 40, 67 L ed 839, 43 S Ct 470; National Labor Relations Board v. Jones & L. Steel Corp. (1937) 301 US 1, 43, 81 L ed 893, 57 S Ct 615, 108 ALR 1352; Consolidated Edison Co. of New York v. National Labor Relations Board (1938) 305 US 197, 221, 83 L ed 126, 26 PUR(NS) 161, 59 S Ct 206.

[16] Petitioners argue that whatever may be the extent of the power to regulate the practices of public utility holding companies, the orders of the Commission now under review are invalid on the ground that the Federal government has no power, through any agency, to decree the dissolution of a state-created corporation. Lillard v. Lonergan (1934) 72 F(2d) 865, 870, cert. denied (1934) 293 US 615, 79 L ed 704, 55 S Ct 147. But the orders in question do not purport of their own force to dissolve the petitioners. In effect, the orders require petitioners to submit plans for complete liquidation, the realization of which will be accomplished pursuant to § 11(d) or § 11 (e) of the act; and when this is done, dissolution will follow under state law as a matter of course. The Federal power here exercised by the Commission is similar to that exercised by the courts under the antitrust acts. In Northern Securities Co. v. United States (1904) 193 US 197, 48 L ed 679, 24 S Ct 436, the court asserted its power to "make any order necessary to bring about the dissolution or suppression of an illegal combination that restrains interstate commerce" (p. 346). The decree in that case left the corporation no alternative but complete liquidation (pp. 355, 356). In Continental Insurance Co. v. Unit-

ed States (1922) 259 US 156, 66 L ed 871, 42 S Ct 540, the court proceeded even more directly to effectuate a dissolution. See pp. 163, 167. See also United States v. American Tobacco Co. (1911) 221 US 106, 187, 55 L ed 663, 31 S Ct 632. Petitioners would have felt no happier about the present orders, if instead of speaking in terms of dissolution the orders and directed petitioners to submit plans looking toward the complete divestment by petitioners of their holdings in their subsidiary companies. In Commonwealth & Southern Corp. v. Securities and Exchange Commission, the court said (48 PUR (NS) at p. 80, 134 F(2d) at pp. 752, 753):

"It may be conceded, as Commonwealth, urges, that the right to exist as a corporation, the power to own and vote stock in subsidiary companies, the right to issue stock having designated preferences, priorities, voting power and other rights, and the right to retire or redeem securities are all local matters, normally regulated by the laws of the state. It does not follow that Congress is restricted in the exercise of the commerce power because any or all of these rights are affected thereby. That is the fundamental weakness of Commonwealth's contention that if § 11(b)(2) is construed so as to permit an order which deals solely with the corporate structure of the holding company and the rights of the stockholders among themselves it is unconstitutional because outside the power conferred by the commerce clause. Such a contention takes entirely too narrow a view of the extent of the power conferred upon Congress by the commerce clause, for it is well settled that activities which are in themselves intrastate may be regulated by Congress if they affect interstate commerce."

See, also, Morawetz, The Power of Congress to Enact Incorporation Laws and to Regulate Corporations (1913) 26 Harv. L. Rev. 667, 680, 681.

[17] The contention is made that "compulsory involuntary reorganization can only take place through the exercise of the bankruptcy power," and that Congress cannot under the bankruptcy power compel the involuntary reorganization of solvent corporations. But the premise is not well founded, as the antitrust cases demonstrate. Section 11(b)(2) rests upon the commerce power, not the bankruptcy power.

[18, 19] Section 11(b)(2) as here applied does not amount to a taking of the private property of petitioners and their security holders for public use without just compensation, in violation of the Fifth Amendment. Petitioners claim that the orders will result in taking their right to exist under their corporate franchises and the valuable property inhering in their organization and financing at great cost. Also, it is urged, the orders take from petitioners their right to retain their investments and from the stockholders their right to retain their indirect interest in such investments through the subholding companies. Reliance is placed upon Louisville Joint Stock Land Bank v. Radford (1935) 295 US 555, 79 L ed 1593, 55 S Ct 854, 97 ALR 1106, holding that Congress may not under the bankruptcy power take without compensation the substantive property rights of mortgagees for the benefit of farmer-mortgagors.

We do not think that the Radford Case is controlling here. Not every curtailment or impairment of existing rights, nor every incidental business loss, resulting from regulatory legislation, is a "taking" in the constitutional sense. See Hamilton v. Kentucky Distilleries & W. Co. (1919) 251 US 146, 157, 158, 64 L ed 194, 40 S Ct 106; Mugler v. Kansas (1887) 123 US 623, 668, 31 L ed 205, 8 S Ct 273; Block v. Hirsh (1921) 256 US 135, 155–157, 65 L ed 865, 41 S Ct 458, 16 ALR 165. In § 19 of the Banking Act of 1933, 48 Stat 186–188, a holding company is forbidden to exercise its previously acquired property right to vote its shares of stock in a national bank unless a permit is first obtained from the Federal Reserve Board; and one of the conditions of obtaining such a permit is that the holding company must agree to divest itself within five years of any interest in any company engaged in the flotation or underwriting of securities. Cf. Section 11 of the Panama Canal Act of August 24, 1912, 37 Stat 566; Lehigh Valley R. Co. v. United States (1916) 234 Fed 682, affirmed (1917) 243 US 412, 61 L ed 819, 37 S Ct 397. Cf. also paragraph (11) of § 5 of the Interstate Commerce Act, as amended by the Emergency Transportation Act of 1933, 48 Stat 219, and comment in H. Rep. No. 213 (73d Cong. 1st Sess.) p. 14. The court in the Northern Securities Case, *supra,* apparently looking through the corporate fiction and recognizing the stockholders of the holding company as the actual owners of the stock of the subsidiary companies, said (193 US at pp. 357, 358): "The decree, if executed, will destroy, not the property interests of the original stockholders of the constituent companies, but the power of the holding corporation as the instrument of an illegal combination of which it was the master spirit, to do that which, if done, would restrain interstate and international commerce."

Petitioners' argument, if sound, would invalidate the whole of § 11 (b). There could be no order under § 11(b)(1) for divestment of scattered holdings. Even the elimination of a third or fourth holding company tier could not be effectuated under the mandatory provisions of § 11(b)(2). It would indeed be a bit ironical if the decision of Brandeis, J., in the Radford Case were held to debar Congress from requiring the reorganization and simplification of interstate holding company systems so as to eliminate therefrom features likely to be productive of future consequences harmful to interstate commerce. We attribute no such effect to the Radford Case. In North American Co. v. Securities and Exchange Commission (1943) 47 PUR(NS) 6, 14, 133 F(2d) 148, 154, the court said:

"Compelling the holding company to dispose of its securities is not the same as condemning private property for public use without paying just compensation. Under § 11(c) the petitioner is given a year within which to comply with the order and may on proper showing obtain an additional period not exceeding one year. If divestment can be effected by distribution in kind, there may be no loss in values. If, as petitioner contends, such distribution will be impossible and a liquidation by sale becomes necessary, the process may be painful to its common stockholders, but we cannot say that

the remedy selected by Congress is so unreasonable, arbitrary, or capricious as to constitute taking property without due process."

In its broad aspect, § 11(b)(2) as here applied in the exercise of the commerce power does not constitute a deprivation of property without due process of law. In view of the findings by Congress, and by the Commission in this case, the remedy selected cannot be said to be unreasonable or capricious. It bears "a real and substantial relation to the objects sought to be attained," namely, the protection of interstate commerce from various future harmful effects which may be anticipated as likely to grow from the undue complexities and inequitable distribution of voting power in the holding company systems. As the court recognized in Nebbia v. New York (1934) 291 US 502, 527, 78 L ed 940, 2 PUR(NS) 337, 54 S Ct 505, 89 ALR 1469, the Constitution "does not guarantee the unrestricted privilege to engage in a business or to conduct it as one pleases. Certain kinds of business may be prohibited; and the right to conduct a business, or to pursue a calling, may be conditioned."

[20] There is the further argument that the proceedings before the Commission violated the due process clause because the security holders were not given notice of the proceedings and were not permitted to vote on the changes to be effected under § 11(b)(2). But the orders under review are directed only to the corporations, which are the named respondents, and we do not perceive that the stockholders are any more indispensable parties here than they are in equity proceedings against corporations under the antitrust acts. Furthermore, the Commission here published in the Federal Register notice of a public hearing of the § 11(b)(2) proceedings, directed not only to the named corporate respondents but also "to all other persons, including the security holders and consumers of the said respondents" who were invited to file applications for intervention on or before a certain date. As to the absence of a vote by the security holders, certainly such a vote is inappropriate at the stage where the Commission is seeking to determine, under § 11(b)(2), whether it is necessary to discontinue the existence of the subholding companies in order to ensure that the structure of the Bond and Share system shall not be unduly complicated and that the voting power shall not be inequitably distributed among the security holders of such system. In Commonwealth & Southern Corp. v. Securities and Exchange Commission (1943) 48 PUR(NS) 72, 81, 134 F(2d) 747, 753, the court had this to say as to the rights of the stockholders in an 11(b)(2) proceeding:

"It is suggested by Commonwealth that the order is also in violation of the Fifth Amendment with respect to its stockholders since it directs an alteration in their rights without their consent and without their having been heard. But without granting its validity we think that this point is premature. The order now under review, as we have pointed out, is primarily designed to enable Commonwealth to comply with the mandate of the law by obtaining the voluntary coöperation of its stockholders. If they do thus coöperate and adopt a plan which

complies with the Commission's order obviously no question of want of due process can arise. On the other hand if a voluntary readjustment cannot be consummated and it becomes necessary to make application to a district court for the enforcement under §§ 11(d) or 11(e) of a plan proposed by the Commission or the company the stockholders will have an opportunity to assert in the district court any objections, including want of due process, which they may have to the plan presented in so far as it affects their rights."

[21] Section 11(b)(2) as here applied is not an "ex post facto law" in violation of the prohibition of Art. I, § 9 of the Constitution. It is immaterial that the structures of the holding company systems may have been built up by means which were lawful prior to the passage of the Public Utility Act of 1935. Section 11(b)(2) does not seek to punish anyone for past acts, lawful when done. It merely seeks, for the future, to eliminate factors in the structures of holding company systems likely to be productive of harm to interstate commerce. In United States v. Trans-Missouri Freight Asso. (1897) 166 US 290, 342, 41 L ed 1007, 17 S Ct 540, an antitrust case, the court rejected a similar argument on the ex post facto point.

[22] Finally, petitioners argue at considerable length that § 11(b)(2) constitutes an unconstitutional delegation by Congress of legislative power to the Commission because it fails to set forth adequate standards for the Commission's guidance. Since the decisions in Panama Refining Co. v. Ryan (1935) 293 US 388, 79 L ed 446, 55 S Ct 241, and Schechter Poultry Corp. v. United States (1935) 295 US 495, 79 L ed 1570, 55 S Ct 837, 97 ALR 947, counsel have hopefully advanced the delegation argument in many cases, without much success. See, for instance, Mulford v. Smith (1939) 307 US 38, 83 L ed 1092, 59 S Ct 648; United States v. Rock Royal Co-operative (1939) 307 US 533, 83 L ed 1446, 59 S Ct 993; Sunshine Anthracite Coal Co. v. Adkins (1940) 310 US 381, 84 L ed 1263, 60 S Ct 907; Opp Cotton Mills v. Administrator of Wage & Hour Division (1941) 312 US 126, 85 L ed 624, 61 S Ct 524; Federal Security Administrator v. Quaker Oats Co. (1943) 318 US 218, 87 L ed 724, 63 S Ct 589; National Broadcasting Co. v. United States (1943) 319 US 190, 87 L ed 1344, 49 PUR(NS) 470, 63 S Ct 997; Hirabayashi v. United States (1943) 320 US 81, 87 L ed 1774, 63 S Ct 1375. We think it clear that the standards in § 11(b)(2), though expressed in general terms, taken in conjunction with the declaration of policy contained in § 1 and the description of the abuses which Congress sought to eliminate, satisfy the constitutional requirements, and afford an adequate guide to the administrative agency. It was so held in Commonwealth & Southern Corp. v. Securities and Exchange Commission, *supra*. It may be said here as the court said in Sunshine Anthracite Coal Co. v. Adkins, *supra*, 310 US at p. 398, that "in the hands of experts the criteria which Congress has supplied are wholly adequate for carrying out the general policy and purpose of the act. To require more would be to insist on a degree of exactitude which not only lacks legal necessity but which

does not comport with the requirements of the administrative process."

Decree will be entered affirming the orders of the Commission.

WISCONSIN PUBLIC SERVICE COMMISSION

Re Northern States Power Company

2-U-1895
January 15, 1944

APPLICATION *for investigation of company duties relating to hot-water heating service and for approval of rules governing extension and limitation of service; service rules disapproved.*

Public utilities, § 44 — Test of status — Submission to regulation.

1. That a company furnishing hot-water heating service has always subjected itself to Commission regulation, has filed rates and annual reports with the Commission as required by the Public Utility Law, and has requested Commission approval of rules governing the conduct of its business, is indicative of its public utility status, p. 47.

Service, § 121 — Duty to serve — Extent of obligation.

2. A public utility owes a duty of service which at least is as broad as its undertaking of service and must serve all customers who may demand the service and agree to take it under reasonable rules and conditions within the limits of such undertaking, p. 47.

Service, § 118 — Duty to serve — Extent of obligation — Use of streets.

3. A public utility which has been authorized to use and occupy public streets owes a duty to serve the members of the public in whose behalf the authority was granted, p. 47.

Discrimination, § 206 — Service rules and regulations.

4. Proposed rules whereby a heating utility seeks to limit its duty of service to existing customers, except where in its judgment and discretion additional load may be acquired without jeopardy to existing customers or without incurring any obligation to repair, extend, rebuild, or replace existing plant, are unlawful and discriminatory, p. 48.

Service, § 117 — Duty to serve — Scope of duty to serve.

5. A company furnishing hot-water heating service must serve all persons who own or occupy property abutting upon the streets and alleys in which the company's mains are laid, p. 48.

(PETERSON, Commissioner, concurs in separate opinion.)

By the COMMISSION: On April 10, 1943, the Northern States Power Company filed an application "for a general investigation and determination of the conditions, duties, and facilities of the said Northern States

Power Company with reference to the furnishing of hot-water heating service at La Crosse, Wisconsin, and for approval of extension rules and limitation of service herein proposed."

Pursuant to the company's application the Commission on April 16th issued a notice of investigation and hearing.

APPEARANCES: Bailey Ramsdell, Attorney, Eau Claire, and John C. Bunge, Attorney, La Crosse, for Northern States Power Company; Philip H. Porter, Attorney, Madison, for E. W. Murphy and Arthur T. Holmes, La Crosse; Arthur T. Holmes, La Crosse, and Miss Julia Hackner, La Crosse, in their own behalf; H. T. Ferguson, Staff Counsel, and H. J. O'Leary, Chief, Rates and Research Department, of the Commission staff.

Briefs have been filed on behalf of the company and Messrs. Holmes and Murphy.

The proposed rules for which the company seeks our approval are as follows:

1. No additional service shall be taken on in the area east of Seventh street.

2. Additional service may be taken on in the area west of Seventh street, provided connection can be made to existing mains and the pressure differential at the point of connection is sufficient to permit adequate service without impairing service already being rendered.

3. The company shall in no instance be required to furnish service beyond that which can be supplied adequately with the present plant and distribution system, and without replacing and rebuilding any part of the same.

4. The company may require from applicants a reasonable advance payment or deposit to guarantee retention of the service applied for for a period of at least five years.

Opinion

The evidence in this proceeding shows that the Northern States Power Company, as successor in interest to several predecessor companies, is operating a central hot-water heating system under an indeterminate permit in the city of La Crosse. Said indeterminate permit arises from the surrender in 1908 by La Crosse Gas & Electric Company of a limited-term franchise granted in 1887 to its predecessor Edison Light & Power Company by the city of La Crosse. The franchise which was introduced in evidence, and under which the system is operated, does not in any way restrict the area of the privilege granted within the city of La Crosse.

The hot-water heating system was initially constructed in 1899. The distribution system consists of slightly over 10 miles of mains and laterals extending from the source of supply at Second and Jay streets in an easterly direction as far as Fifteenth street, a distance of approximately 6,200 feet. Hot water for the system is supplied from the company's Edison electric generating plant, the principal source of heat being steam exhausted from the electric generating turbines.

As of December 31, 1942, the company served 169 residential customers and 133 commercial customers by means of 277 service connections to its mains and laterals. Service is ob-

tained by extracting the heat from hot water circulated through the customers' radiator systems. Such circulation of water is forced by means of pumps located at the central plant. The water is heated at the central plant to a temperature of about 203° F. and is then pumped into the feed mains at an initial pressure of approximately 60 pounds. After circulating through the customer's radiator system the water enters return mains and is sent back to the plant which it enters at a pressure of approximately 6 pounds. The circulation of water within the system is dependent upon the maintenance of a differential in pressure between the feed and return mains which are equal in size.

Friction losses in the mains tends to reduce the pressure in the feed mains as the distance from the plant increases. Likewise, a drop in pressure is suffered by the circulation of water through any customer's radiator system. A drop in water temperature is also experienced as the distance from the central plant increases due to losses in the mains so that a customer located at a considerable distance from the plant requires a greater volume of water for the same amount of heat than one located nearer the source of supply. The foregoing physical characteristics constitute a definite limitation upon the maximum amount of service which can be furnished by a central hot-water heating system of a given design. The physical capacity of such a system can be expanded by one or more of the following means: (1) increasing the size of the feed and return mains, (2) increasing the quantity of hot water available, (3) increasing the initial pressure differential at the plant or along the distribution system, and (4) increasing the temperature of the water.

In support of its application, the company presented evidence that the amount of radiation required by connected customers uses up practically the entire capacity of the present plant. In particular, the company has presented testimony purporting to show that the differential in pressure at the eastern extremity of the system is so low as to preclude the possibility of connecting additional customers east of Seventh street. To further substantiate the necessity for the proposed rules, the company submitted data to show the additional investment which would be required if it became necessary to serve a 25 per cent increase in radiation. One witness testified that an additional investment of $510,000 would be required, of which about $190,000 would be allocable to the electric utility. Another witness offered by the company testified that an additional investment of $218,712 would be required, all of which would be directly assignable to the heating system.

A witness for the objectors testified that some additional customers could be served near the eastern extremity of the system by the installation of a booster pump at a cost of about $1,500. He also testified that by the expenditure of a relatively small amount of money, the company would be able to take on additional customers.

After a careful review of the voluminous technical evidence, we arrive at the following general conclusions relative to the present physical capacity of the hot-water heating sys-

tem and the possibility of serving additional customers.

1. The system is not properly designed to furnish adequate and satisfactory service to all of the area adjacent to the present mains and laterals. However, whatever may be the faults in design, responsibility for such engineering mistakes lies wholly with the applicant's predecessors. Shortly after the original plant was constructed the mains were voluntarily extended east from the point of original termination, and this extension has added greatly to the difficulties encountered in furnishing satisfactory service. Despite such difficulties of service, the company has continued to serve customers as far east as Fifteenth street, although it has followed a policy of discouraging the addition of new customers to the point of an outright refusal of service. Testimony of company witnesses verifies the conclusion that if no customers were served east of Seventh street, the system could furnish adequate service in the area west of that point with little or no additional investment.

2. The company has followed a program of permitting the system and the service to deteriorate with the passage of time. Many of the mains and laterals are from twenty-eight to forty years old, practically at the end of their useful life. The interior of some of the mains has become pitted and encrusted, thereby decreasing their carrying capacity and increasing the friction against the flow of water. In addition, some of the mains are uncoated and were installed in wooden ducts. These mains have suffered exterior corrosion and have become weakened. It is apparent that the maintenance policy followed by the company for many years has been one devoted principally to providing merely a continuation of the service to existing customers, the amount and quality of which is determined by the gradual deteriorating condition of its plant and facilities. There has been little effort devoted toward maintaining the system in such condition that its service capacity would be approximately equivalent to its capacity when new.

3. The company's estimates of the investment required to serve a 25 per cent increase in radiation do not furnish a reliable basis for passing judgment upon the reasonableness or necessity for the proposed rules. The record shows that there are now outstanding 16 applications for service which it is estimated would result in an increase of approximately 5 per cent in required radiation. An increase of 25 per cent in radiation requirements would require approximately 70 new customers. No evidence has been offered which would suppport the conjecture that such an increase in service requirements might take place.

4. It appears that the rates charged by the company approach the level of costs obtained by heating with oil and coal. The basic rate is 24 cents per season per square foot of radiation required. Exhibit 2 in Docket 2–U–1895 is a tabulation showing the 1942–1943 customer billing and room count. Company witnesses testified that in a number of instances the billings shown would be about equivalent to the fuel cost of heating by oil. Prior to 1940 the basic rate had been 19 cents per square foot of required

radiation for a number of years. Furthermore, prior to 1940 customer radiation requirements had not been kept up to date and had been computed on the basis of an obsolete formula. The operation of the heating system at a loss for many years was due, in part at least, to the inadequacy of the rates charged for service.

With the foregoing conclusions in mind as to the character of the physical plant and past operations, we turn to consideration of the necessity for and the reasonableness of the proposed rules. Considerable testimony and argument on brief have been offered by the company bearing upon the nature and extent of its undertaking of service. It is contended that the undertaking of service is limited to the capacity of existing facilities and that pursuant to such undertaking, the company should have the right either to refuse or to accept applications for service, depending upon whether service can be rendered at the specific location without enlargement or replacement of plant and without detriment to the service of existing customers.

[1] Counsel for applicant in its brief contends that under the doctrine of Cawker v. Meyer (1911) 147 Wis 320, 133 NW 157, 37 LRA(NS) 510, it is not a public utility because the original predecessor company did not undertake to furnish service which might prove to be beyond the capacity of its plant. The franchises under which the applicant and its predecessors have rendered service and the acts of both applicant and its predecessors refute any such claim. Its predecessor accepted a franchise from the city of La Crosse and, pursuant to that franchise, constructed a distribution system within a limited area of the city. That franchise was later surrendered for an indeterminate permit. Originally the demand for service was such as could be furnished by the use of exhaust steam from the Edison electric plant. However, the record shows that for the past ten years, applicant has had to rely upon live steam for approximately 10 per cent of the heating load. Furthermore, the applicant or its predecessors did not limit service to those customers who originally took service but extended its system, took on increased loads from existing or previously served customers, and, prior to 1922, added some new customers. Although not conclusive in itself but indicative of the intention of the applicant, it is significant that it has always subjected itself to regulation, has filed rates and annual reports with the Commission as required by the public utility law, and is now before us requesting approval of rules governing the conduct of its business. If the applicant is not furnishing hot-water heating service in La Crosse as a public utility, it should not be before this Commission with its rules and, in any event, we would be without authority to act in the premises. We proceed with consideration of the subject matter on the basis that applicant is operating as a hot-water heating utility in the city of La Crosse.

[2, 3] As a public utility the applicant owes a duty of service which at least is as broad as its undertaking of service. Within such undertaking the status of a public utility imposes a duty upon the applicant to serve all customers who may demand the service and agree to take it under reason-

able rules and conditions. The course of conduct pursued by the applicant and its predecessors leads to the inescapable conclusion that the duty of service extends at least to those premises which abut upon the streets and alleys in which the applicant has installed its mains and laterals. Furthermore, it is implicit that the utility as the recipient of the privilege of using and occupying streets belonging to the public of La Crosse, owes a duty to serve the members of the public in whose behalf the privilege was granted.

[4] The proposed rules would permit the applicant not only to continue its existing service for an indefinite period in the area east of Seventh street, but during the same period would permit it to deny service to any other person in the same area, even though his premises may abut upon the street where mains are laid, and his next-door neighbor may be enjoying applicant's service. Likewise, under the proposed rules the applicant would be permitted to grant or withhold service within the area west of Seventh street where it is presently serving; the determination of whether such additional service shall or shall not be given resting upon whether service can be supplied with existing facilities, and without undue expense or inconvenience to applicant, or without detriment to existing service. Also, under the proposed rules the applicant seeks to limit its service obligation to customers to that which can be provided adequately with its present plant and distribution system, and without repairing, replacing, or rebuilding any part of the system.

In short, by its proposed rules, the applicant seeks to limit its duty of service to existing customers, except that where in its judgment and discretion additional load may be acquired without jeopardy to existing customers or without incurring any obligation to repair, extend, rebuild, or replace existing plant.

We do not see how such rules could be approved as either reasonable or lawful. We think that, if approved, they would be violative of the provisions of § 196.03, Statutes, which provides that "every public utility is required to furnish reasonably adequate facilities." The purpose of the proposed rules is repugnant to the fundamental principle applicable to utilities as public service corporations, that their obligation of service is owed and applies to all alike. The proposed rules would permit the company to pick and choose which of its potential customers would receive service and which would not receive service, thereby constituting unjust discrimination.

The evidence adduced in this proceeding as to the physical condition of the plant, the character of its operations, and its past history does not support the necessity for such rules. We do not mean to say that the plant can be extended without limit or be operated at a profit under substantially different load conditions. Those matters are not properly at issue in these proceedings, but would be properly before the Commission if the company were seeking to abandon all or a part of its facilities pursuant to the provisions of § 196.81, Statutes.

[5] We see no escape from the conclusion that the undertaking or obligation of service of this utility includes,

at least, service to all persons who own or occupy property abutting upon the streets and alleys in which applicant's mains are laid. This is contrary to a previous holding of the Commission in the so-called "bowling alley case" affecting the service obligations of this utility (Docket U–2719, decided July 13, 1922, 26 Wis RCR 843). However, we are of the opinion that the decision in that case was in error. We know of no way in which applicant can deny service to any one of those persons so long as it chooses to give service to the others. To hold otherwise would be to fly in the face of legal requirements which we are at no more liberty to ignore than the applicant itself.

The Commission finds:

1. That the Northern States Power Company owns and operates property for the furnishing of heat to the public in the city of La Crosse, under and pursuant to an indeterminate permit resulting from a duly surrendered franchise granted to one of its predecessors in interest.

2. That the Northern States Power Company, operating as a public heating utility in the city of La Crosse, owes a duty of service which extends at least to all persons who own or occupy property abutting upon the streets or alleys in which applicant's mains are laid.

3. That the rules proposed by the applicant prescribing and defining the proposed limitation upon the obligation of service of said Northern States Power Company as a public utility for the furnishing of heat to the public in La Crosse, if permitted to be effective, would be unreasonable and unjustly discriminatory.

PETERSON, Chairman, concurring: Central heating utilities, such as the one here involved, are by their very nature limited to the number of customers that they can serve efficiently. With its present plant the instant utility has just about reached that saturation point.

It is the duty of a public utility to furnish "reasonably adequate facilities." Testimony herein substantiates the belief that by the expenditure of approximately $1,500 the company can install a booster pump which will enable it to serve additional customers. Certainly it cannot be successfully advanced that the company has not held itself out to serve all of the premises to which its laterals extend. I am convinced that by the efficient maintenance of its present plant, plus the installation of the booster pump above referred to, the company can efficiently serve all premises to which its laterals extend, whether present customers or not, and may be able to serve some additional customers. The furnishing of reasonably adequate facilities requires this.

It is with that portion of the majority opinion which states that the company' obligation of service "includes, *at least,* service to all persons who own or occupy property abutting upon the streets and alleys in which applicant's mains are laid," (italics supplied) that I disagree. The Commission properly finds that "The system is not properly designed to furnish adequate and satisfactory service to all of the area adjacent to the present mains and laterals."

This places the company and the present customers in an anomalous situation. The company is told that it

must serve everyone in the area, even after a finding that it is physically impossible for it to do so with its present plant. Does this then mean that, to place itself in a position where it is complying with the law, the company must reconstruct its entire plant and system? I cannot believe so, as not only is this type of utility becoming obsolete, but the cost would be prohibitive.

The majority opinion intimates that if the company cannot fulfil its obligations to serve all present and prospective customers adjacent to its mains and laterals, then surcease might be had in an abandonment proceedings. I assume this means abandonment of all service east of Seventh street. I cannot agree with this. East of Seventh street there are at present approximately seventy customers, being in excess of 40 per cent of the company's present residential customers. The company wants to and can continue to serve them. The customers want the service. I cannot believe that a practical and pragmatical solution of the existing problem requires this Commission to insist that these customers can no longer have that service simply because the company cannot place itself in a position where it can serve all potential customers. It may be argued that such solution constitutes a strict and literal interpretation of a utility's duty, but, under the circumstances, good judgment should outweigh this possible interpretation, so as not to impose this unnecessary and grave (it might reasonably cost the seventy heating customers from 20 to 30 thousands of dollars to change their heating systems in case of abandonment) hardship on the customers east of Seventh street.

If so strict an interpretation of this utility's obligation to serve is to be enforced, then it is well to bear in mind that the company's privilege under the indeterminate permit is to serve the *entire* city of La Crosse. This, however, brings up a question that it is unnecessary to decide here. I merely cite it to call attention to future problems that might arise in the event of a demand for service by one not adjacent to the present line.

For the above reasons, I concur in the conclusion that the proposed rules should not be accepted for filing, but cannot concur in the above-referred-to parts of the opinion.

ILLINOIS APPELLATE COURT, THIRD DISTRICT

McLin J. Brown
v.
Illinois Iowa Power Company

Gen. No. 9394
— Ill App —, 52 NE(2d) 722
November 24, 1943; rehearing denied February 1, 1944

BROWN v. ILLINOIS IOWA POWER CO.

APPEAL *from judgment for plaintiff in action to enjoin public utility company from discontinuing service to plaintiff; reversed and remanded, with directions.*

Payment, § 48 — Service denial to enforce — Insolvency of utility company — Creditor customer.

1. The insolvency of a public utility company indebted to a particular customer on a charge not connected with the utility service does not preclude the company's right to discontinue service to such customer for nonpayment of his bill, p. 54.

Payment, § 45 — Service denial to enforce — Disputed bills.

2. A complaint alleging that a public utility company was indebted to a customer for legal fees in excess of the amount the customer owed the utility company, that the company had added 2 per cent to bills not paid in ten days, causing a dispute as to the amount of the bills, and that the company was threatening to shut off service to the customer, does not preclude service denial to enforce payment of the bills on the ground that there is a bona fide dispute as to the correctness of the bills rendered, p. 54.

Payment, § 48 — Service denial to enforce — Counterclaims.

3. The Civil Practice Act provision relating to counterclaims does not authorize a customer of a public utility company, in maintaining an action against the company for services rendered, to anticipate a counterclaim for utility service furnished the customer, and thus preclude service denial to enforce payment until a final accounting is had, p. 55.

APPEARANCES: LeForgee, Samuels & Miller, of Decatur, and D. R. Kinder, of Litchfield, for appellant; Herbert W. Dey, of Hillsboro, and J. D. Wilson, of Nokomis, for appellee.

DADY, P.J.: This is an appeal by defendant from an order granting a temporary injunction.

On August 8, 1942, the plaintiff, individually and as surviving partner of a law firm, filed in the circuit court of Montgomery county a complaint consisting of five counts. Four of the counts were at law and are immaterial to the present issue.

Count five was in equity and was the only count on which the injunction was based. Such count, so far as is material, alleged that at the time of the commencement of the suit defendant was and for several years prior thereto had been a public utility corporation furnishing gas and electric service to plaintiff at three places owned by him or in which he had an interest, namely, his residence, an office building, and an apartment building; that plaintiff promptly paid all bills rendered for such service to his home prior to September 1, 1940, and to such other two properties prior to October 1, 1940; that on September 1, 1940, defendant owed plaintiff "in excess of $10,000" for legal services rendered, which defendant had refused to pay, and that thereupon plaintiff "rightfully" refused to pay any and all bills rendered by defendant for gas and electric service at such three places, and that "the amount due and owing to the defendant from the plaintiff is still greatly in excess of the amount owed by the plaintiff to the defendant for

electricity and gas service"; that defendant had wrongfully threatened to discontinue such service; that defendant had ample current and gas to render such service; that there was no other public utility authorized to render such service; that plaintiff had no means of generating electricity or producing gas; and that if defendant carried out such threats plaintiff would suffer irreparable injury and would have no remedy at law.

Such count prayed that inasmuch as the matter was urgent and did not permit of notice for a preliminary injunction, a temporary order issue enjoining defendant from discontinuing such service until the court should otherwise order, and until an accounting might be had, and that upon a hearing the injunction be made permanent.

On December 21, 1942, plaintiff amended his complaint by adding an allegation that on February 1, 1935, the plaintiff was licensed to practice law. Such amendment also, to use the language of the amendment, "reversed the word 'to' and the word 'from' where they first followed the words" appearing above "at such three places."

On March 3, 1943, plaintiff further amended his complaint by adding the words "at defendant's request" after the words "in excess of $10,000 for legal service rendered."

On March 31, 1943, the plaintiff filed his third amendment alleging that the defendant on March 3, 1943, was and still is insolvent, and therefore unable to pay its common creditors.

Said amendment further alleged that the defendant had charged the plaintiff and rendered to him a bill for electric service at his residence since September 1, 1940, by which it had charged to him 2 per cent of the amount of each and every bill for failure to pay the same within ten days after the period for which the bill was rendered, and that defendant had rendered to plaintiff a bill for electric and gas service at said two other places so owned by plaintiff, by which it had charged to plaintiff 2 per cent of the amount of each and every bill so rendered for failure to pay the same within ten days after the period for which the bill was rendered; that the defendant at the time each and every bill was so rendered was indebted to plaintiff in a sum greatly in excess of each and every bill so rendered, including all prior bills rendered, including such 2 per cent, and that the said charges so made by defendant of such additional 2 per cent had given rise to a dispute between the plaintiff and the defendant as to the correct sum, if any, which plaintiff owed defendant for electric and gas service.

On August 8, 1942, on motion of plaintiff, a temporary writ of injunction was issued restraining defendant from discontinuing such service until such time as the court should direct, and until an accounting might be had, or until the court should make other order to the contrary.

On September 21, 1942, the defendant filed its motion to disolve such temporary injunction.

On March 3, 1943, on motion of the plaintiff an order was entered ordering that the order of August 8, 1942, be vacated as to any moneys due from plaintiff to defendant for gas and electric service from and after March 3, 1943, and ordering that such injunction remain in full force and effect as to all charges for gas and electric serv-

ice furnished by defendant to plaintiff accruing prior to March 3, 1943. Thereupon such order ordered that the motion of the defendant to dissolve the injunction granted and issued on August 8, 1942, be denied.

The defendant has brought this appeal to review the order of the trial court denying defendant's motion to dissolve such temporary injunction.

The three amendments to count five were allowed over the objection of the defendant, and defendant contends that the sufficiency of its motion to dissolve should not be affected by the amendments. We do not consider it necessary to discuss such question for it is our opinion that count five, both as originally filed, and as amended, did not state facts which would justify the issuance of such injunction.

Only three Illinois cases have been called to our attention in which we find discussed the question of the right of a public utility to shut off service because of nonpayment of service charges.

In Barry v. Commonwealth Edison Co. (1940) 374 Ill 473, 476, 37 PUR (NS) 24, 26, 29 NE(2d) 1014, 1016, the court said: "As a general rule a public utility furnishing water, gas or electricity to the public may adopt and enforce as a reasonable regulation that such service to the customer may be shut off from one who has defaulted in payment therefor. Steele v. Clinton Electric Light & P. Co. (1937) 123 Conn 180, 19 PUR(NS) 483, 193 Atl 613, 112 ALR 232, annotation. An exception to this rule, however, is to be observed where there is a bona fide dispute either as to the customer's liability or as to the correctness of the bill rendered. The right to discontinue service cannot be exercised so as to coerce the customer into paying a bill which is unjust or which the customer in good faith, and with show of reason, disputes. Otherwise the utility, in effect, would pass judgment upon its own case."

In Hiller v. Pinckneyville (1933) 269 Ill App 53, 54, it appears that a physician conducted a hospital, the water supply for which was procured from the city. The physician rendered service to three city employees and made a charge of $25 therefor against the city. The physician refused to pay for water unless the city would credit him with the $25, and for this reason the city thereupon shut off the water. Thereupon the physician obtained a mandatory injunction. A motion of the defendant to dissolve was denied. On appeal the appellate court reversed such order of the trial court and in so doing said: "The law is well settled that a city will not be permitted to force the payment of a separate and distinct claim by shutting off the water or to litigate such a claim in a suit for injunction. That being true, appellee cannot litigate in this case the merits of his claim for medical services. If he thinks he has a valid claim he must sue at law."

In Barrell v. Lake Forest Water Co. (1915) 191 Ill App 269 (which is an abstract decision), the court held that a public service corporation may shut off water for nonpayment of a bill if there is no overcharge.

In Barrett v. Broad River Power Co. (1928) 146 SC 85, 106, 143 SE 650, 657, the reasons for the rule are well stated. The court there said: "The denial of the usual power of a public service company to cut off its

patron's supply of water or electricity, when there is a bona fide dispute as to the amount due for the service furnished, is founded upon the principle that the patron is not to be penalized, oppressed, or coerced because he asserts his rights as a citizen to dispute, in good faith, a bill of the company. It is not based upon the other idea that the consumer has the right to require a continuance of the service when accounts therefor are not questioned, until there is a settlement of some other account or demand that the consumer may have, or claim to have, against the company, other than one with reference to the service bills. If the latter principle were the foundation of the rule in respect to the mutual rights of the parties as to a continuation of the supply of water and electricity, impecunious and advantage-seeking individuals could, by the asertion of almost any kind of demand against a public service company, require it to continue almost indefinitely to supply them with either water or electric current." See, also, Steele v. Clinton Electric Light & P. Co. *supra*.

[1] The allegation of count five, as amended, that the defendant "on March 3, 1943, was and still is insolvent," is a mere conclusion and states no facts on which the conclusion is based. However, if insolvency were well pleaded, so as to be admitted by the motion to dissolve, no authority is cited indicating that, and we can see no reason why, an insolvent utility corporation, indebted to a particular customer on a charge not connected with a service charge, should, in effect, be required to furnish continued service to such customer although the latter is in default and refuses to pay a bona fide claim for service already furnished him.

[2] Obviously the main purpose of the last amendment was to attempt to show that there was a bona fide dispute either as to the plaintiff's liability or as to the correctness of the bills rendered by the defendant. By such amendment the plaintiff does not show or even allege that any bill, excluding or including the 2 per cent, was incorrect or unjust. The only allegation as to any dispute is that the "charges . . . of 2 per cent had given rise to a dispute." The complaint does not state the amount of all or of any unpaid service charges, including or excluding the 2 per cent. While the complaint does not state any facts from which it can be determined what such 2 per cent would amount to, the affidavit of plaintiff, filed in support of his motion for leave to file the last amendment, states that the defendant "owes and is" indebted to plaintiff "more than $7,500," and that the "defendant claims that the plaintiff . . . owes the defendant less than $1,500 for electric and gas service," and further states that while defendant at all times in question has owed plaintiff sums in excess of such service charges, yet defendant has charged plaintiff an additional two per cent of each bill because of failure of plaintiff to pay same within ten days after rendition, and that this charge of 2 per cent has given rise to a dispute as to the correct sum, if any, which plaintiff owes for such service. From these statements in such affidavit, and from the allegation in the amendment that the "charges . . . of 2 per cent have given rise to a dispute," it would seem to follow that the only disputed

charge, if any, is 2 per cent of $1,500, which would be $30. The effect of the injunction was to not only restrain the defendant from discontinuing service because of the nonpayment of the 2 per cent item amounting to not more than $30, which is not alleged to be unreasonable or unjust, but also to restrain defendant from discontinuing service because of the nonpayment of bona fide undisputed service charges which had accrued over a period of nearly two years immediately preceding the filing of the complaint—although the complaint made no tender of payment of such undisputed service charges, and although defendant had the right to discontinue service for nonpayment of bona fide undisputed service charges.

[3] The three Illinois cases above referred to were decided prior to the adoption of our Civil Practice Act, Chap 110, § 162, Rev Stats, Par 1 of § 38 of such act provides that "any demand by one or more defendants against one or more plaintiffs, . . . whether in the nature of setoff, recoupment, crossbill in equity or otherwise, and whether in tort or contract, for liquidated or unliquidated damages, or for other relief, may be pleaded as a cross-demand in any action, and when so pleaded shall be called a counterclaim." Plaintiff contends that by this section he has the right to anticipate a counterclaim of defendant, and thus have continued service from defendant until a final accounting is had. We see no force to this contention.

For the reasons indicated, it is our opinion that the trial court erred in denying the motion of defendant to dissolve the injunction so issued on August 8, 1942.

The order of the circuit court so entered on March 3, 1943, is therefore reversed, and this cause is ordered remanded to the circuit court with directions to that court to dissolve such injunction, and for further proceedings consistent with this opinion.

Reversed and remanded, with directions.

VERMONT SUPREME COURT. FRANKLIN

Otis A. Hall et al.

v.

Village of Swanton et al.

No. 579
— Vt —, 35 A(2d) 381
January 4, 1944

SUIT *by customer of municipal water and electric plant to restrain discontinuance of service and for other relief; decree overruling demurrer affirmed and cause remanded.*

Rates, § 214 — Contract obligation.

1. Refusal by a municipal plant to continue service under promulgated and published rates, offered to and accepted by a customer, until those rates are changed as authorized by law would constitute a breach of contract, p. 58.

Municipal plants, § 2 — Proprietary status.

2. A municipal corporation, in acquiring and operating a public utility, acts in its private or proprietary, as distinguished from its public or governmental, capacity, p. 58.

Injunction, § 32 — To prevent service discontinuance — Water.

3. Injunction is the proper remedy to prevent the shutting off of water service to a householder who denies in good faith either his liability or the amount of the charge, although an action at law would lie for damages, since irreparable injury to convenience and health might be caused by discontinuance, p. 58.

Service, § 126 — Duty of municipal plant.

4. The fact that a public service system is owned by a municipal corporation does not affect the rule that there must be no unjust discrimination and that the commodity must be furnished to each and every citizen or resident who needs the commodity sold or the service given, p. 58.

Rates, § 252 — Schedules — Deviation.

5. Rates which have been lawfully fixed must be adhered to, and neither higher nor lower rates may be charged than those specified, p. 58.

Injunction, § 32 — To prevent service discontinuance — Effect of Commission regulation.

6. Injunction is the proper remedy to restrain the wrongful shutting off of electric service which a municipal plant is under contract to furnish, since the shutting off of the supply would cause irreparable injury and a remedy that might be had on application to the Commission is not adequate, p. 59.

Injunction, § 41 — Scope of equity powers — Prevention of overcharges — Service denial — Accounting and reparations.

7. A court of equity which has acquired jurisdiction to prevent service discontinuance by a municipal plant, because of a dispute over charges, may properly restrain the municipality from collecting or attempting to collect charges in excess of legal rates and from shutting off service for failure to pay such charges, and it may also order an accounting and render a decree for repayment of overcharges made, p. 59.

APPEARANCES: P. L. Shangraw, of St. Albans, for plaintiffs; Sylvester & Ready, of St. Albans, for defendant.

Before Moulton, C. J., and Sherburne, Buttles, Sturtevant, and Jeffords, JJ.

BUTTLES, J.: The plaintiffs in this bill in chancery allege that they are the owners of a single family house in the defendant village which they occupy as a residence. The defendant village, hereinafter termed the defendant, is engaged in the generation, sale, and distribution of electric power and current and since January 1, 1936, has published and had on file with the Public Service Commission a certain schedule of rates charged for such current and service, as applied to resi-

dences. The defendant is also engaged in the sale and distribution of water and water service for residence and domestic purposes and since Jan. 1, 1936, it has had on file, published and in effect a fixed schedule of charges for such water and water service. During the period referred to in the complaint it is alleged that the defendant, from time to time, has charged the plaintiffs rates much in excess of the rates so scheduled both for electric current and for water furnished to their residence. It is further alleged that on May 14, 1942, the defendant filed with the Public Service Commission an amendment to its electric rate schedule which would require the plaintiffs to provide a meter, thereby increasing the cost of electric service to them. It is claimed that this amendment is invalid because the defendant failed to give thirty days notice and to comply in other respects with PL § 6100. It is alleged that the defendant, in order to enforce compliance with its demands, has threatened to shut off the water and electricity from the plaintiffs' residence and has in fact at different times shut off the electricity therefrom. It is alleged that relief in a court of equity is required to prevent a multiplicity of suits and irreparable injury to the plaintiffs.

An injunction is sought restraining the defendant from collecting charges in excess of its scheduled rates or attempting to enforce compliance with the alleged illegal amendment above referred to. An accounting is also prayed for with a decree for repayment of any money found to have been wrongfully extorted by the defendant from the plaintiffs. There is a further prayer that the court take cognizance of the matters set forth in the complaint, try and determine all issues presented and make such suitable and proper orders and decrees as may appear just and proper. There is also a prayer for general relief.

The defendant demurred to the complaint upon the grounds, in brief, that the plaintiffs have a complete and adequate remedy at law upon the facts stated, either through proceedings before the Public Service Commission or otherwise; that the charges assessed for water and water service are wholly matters sounding in a contractual relation between the plaintiffs and defendant of which a court of chancery is without jurisdiction; and that the court of chancery is without jurisdiction to order the refund of any alleged overcharges for electric current until the Public Service Commission shall have found that the charges made were not in accordance with the defendant's posted and published schedules of rates. The demurrer was overruled pro forma and the cause passed to this court upon the defendant's exception before final judgment in accordance with the statute.

The charter of the village of Swanton (No. 252 of the Acts of 1888, § 32) provides that: "Said village shall have the power to provide a supply of water for the protection of the village against fire and for other purposes and to regulate the use of, and rates for, the same. And to light the streets of said village by electric lights or otherwise as said village may elect." Later amendments to the charter confirm the right to regulate the rates to be charged for water. By § 1 of No. 280 of the acts of 1908 it is provided that: "Said village shall have the

power to . . . furnish water, electric lights, and electric power to parties residing within or without the corporate limits of the village on such terms and subject to such regulations as may be agreed upon between the contracting parties."

The effect of PL §§ 6084 and 6085 is to give the Public Service Commission general supervision of all companies, including municipalities, engaged in the manufacture, distribution, or sale of gas or electricity directly to the public or to be ultimately used by the public for lighting, heating, or power, and also of companies, *other than municipalities,* engaged in the collecting, sale, and distribution of water for domestic purposes or fire protection purposes. This difference between the defendant's water service and its electric service, as we shall see, does not affect the questions here involved.

[1] The promulgation and publication of rates for water service and for electricity constituted offers to furnish such services to all eligible persons who might apply therefor. It appears that the plaintiffs accepted the offers and thereby entered into continuing contracts with the defendant by which the latter was bound to furnish those services to the plaintiffs as long as they complied with the conditions of the contracts, and at the stipulated rates until those rates should be changed in the manner in which the defendant might be authorized by law to change them. But the complaint alleges that the schedules referred to were "the only rate schedules, charges, rates, rules, and regulations as to charges in force" during the period in question. The facts alleged, if proved, clearly indicate breaches of the contracts.

[2] In acquiring and operating any kind of a public utility, a municipal corporation acts in its private or proprietary as distinguished from its public or governmental capacity since the furnishing of water or lights to its inhabitants is in no sense a governmental function. Valcour v. Morrisville (1932) 104 Vt 119, 131, 158 Atl 83.

[3–5] While an action at law would lie for damages caused by the unwarranted shutting off of a householder's water supply it is apparent that irreparable injury to convenience and health might well be caused thereby. An injunction is the proper remedy to prevent the shutting off of the water in cases where the consumer denies in good faith either his liability or the amount of the charge. 27 RCL 1457; Carter v. Suburban Water Co. (1917) 131 Md 91, 101 Atl 771, LRA1918A 764, 765; Gordon & Ferguson v. Doran (1907) 100 Minn 343, 111 NW 272, 8 LRA(NS) 1049, 1053; Note, 31 LRA(NS) 302. The duty to its customers of a public utility engaged in the distribution of electricity does not differ from the duty of a public utility engaged in supplying water. The fact that a public service system is owned by a municipal corporation does not affect the rule that there must be no unjust discrimination and that the commodity must be furnished to each and every citizen or resident who needs the commodity sold or the service given. McQuillan, Municipal Corps. 3591, § 1697. After rates for electricity have been lawfully fixed by statute, ordinance, order of a commission or filed schedules they must be adhered to; and neither higher nor lower rates may be charged than those specified. 29 CJS Electricity, § 29;

Mapleton v. Iowa Pub. Service Co. 209 Iowa 400, PUR1929B 359, 223 NW 476, 68 ALR 993.

[6] An injunction will ordinarily be granted to prevent a public service corporation, or other corporation or individual, from wrongfully shutting off light which such corporation is under contract to furnish, on the theory that the remedy at law is inadequate, and that the shutting off the supply would cause irreparable injury. 32 CJ 225 Injunctions, § 349; Mobile Electric Co. v. Mobile (1918) 201 Ala 607, 79 So 39, LRA1918F 667, 671; People's Nat. Gas Co. v. American Nat. Gas Co. (1912) 233 Pa 569, 82 Atl 935; Sewickly Borough School Dist. v. Ohio Valley Gas Co. (1893) 154 Pa 539, 25 Atl 868.

A legal remedy in order to be adequate in the sense involved in determining the jurisdiction of equity must be "as practical and as efficient to the ends of justice and its prompt administration as the remedy in equity." Bourke v. Olcott Water Co. (1911) 84 Vt 121, 124, 78 A 715, 716, 33 LRA(NS) 1015, Ann Cas 1912D 108; West Rutland v. Rutland R. Light & P. Co. (1925) 98 Vt 379, 382, 127 Atl 883. A remedy that might be had by these plaintiffs on application to the Public Service Commission is not considered adequate since the case presented is one that demands preventive relief. West Rutland v. Rutland R. Light & P. Co. *supra.* In that case it is said at p. 383 of 98 Vt at p. 884 of 127 Atl: "The allegations of the bill show that irreparable injury was threatened, and that immediate relief was essential. This entitled the plaintiffs to relief by way of injunction. It is manifest that the Public Service Commission cannot grant this relief."

[7] It is a well-recognized principle that equity jurisdiction having rightfully attached on one ground, it should be made effective for the purposes of complete relief. Holton v. Hassam (1920) 94 Vt 324, 328, 111 Atl 389; Van Dyke v. Cole (1908) 81 Vt 379, 391, 70 Atl 593, 1103; Deerfield Lumber Co. v. Lyman (1915) 89 Vt 201, 208, 94 Atl 837.

This principle would warrant the court of chancery, upon proof of the necessary facts, in restraining the defendant from henceforth collecting or attempting to collect from the plaintiffs charges for water or electricity in excess of its regularly established and published rates therefor, and from shutting off or discontinuing the plaintiffs' supply of water or electricity because of failure to pay such excessive charges.

The court would also be warranted, upon a proper showing, in granting the plaintiffs' prayer for an accounting and in rendering a decree for repayment of overcharges found to have been made. Whether the amendment requiring the plaintiffs to furnish a meter was made in accordance with provisions of the statute, and, if not, whether it constituted an unwarranted overcharge is a matter for the consideration of the trial court.

Decree overruling defendant's demurrer affirmed and cause remanded.

CONNECTICUT PUBLIC UTILITIES COMMISSION

Re The Southern New England Telephone Company et al.

Docket No. 7415
February 10, 1944

CITATION *to show cause why Commission should not require telephone company to refund increase in revenues received as result of rate reductions and changes in division of revenues with long-distance company; citation terminated.*

Rates, § 143 — Cost of service — Adequate service — Wartime conditions.
A telephone company should not be required to decrease its intrastate toll rates by making a refund of an increased share in toll revenues which it has received and is receiving following the revision of a contract with a long-distance company, where, because of increased costs, the indicated rate of return is not excessive, in view of the obligation to provide adequate service and the difficulties of doing so under wartime conditions.

By the COMMISSION: The following Citation, dated October 7, 1943, was served by registered mail on The Southern New England Telephone Company:

"*Docket No. 7415* [Title of proceeding omitted.]

"Citation

"To The Southern New England Telephone Company
New Haven, Connecticut:

"It appearing from Federal Communications Commission's Docket No. 6468 and a letter of your company to the Commission, dated October 2, 1943, that the revenues of The Southern New England Telephone Company will be increased approximately $928,000 on an annual basis as the result of rate reductions initiated by the Federal Communications Commission with the American Telephone and Telegraph Company and the changes in the methods of the division of revenues from business handled jointly by the Long Lines Department of that company, the Associated Bell Telephone Companies and other connecting carriers;

"You are hereby *ordered* to appear before the Commission at its office in Hartford, on Thursday, October 14, 1943, at eleven o'clock in the forenoon, and there show cause why the Commission should not require your company to refund to its customers the increase in revenues received by your company

as a result of these rate reductions and changes in division of revenues.

"Dated at Hartford, October 7, 1943.

"Per order

"PUBLIC UTILITIES COMMISSION
"By (s) R. C. Schneider
"Its Secretary"

The hearing was thereafter postponed by the Commission from October 14, 1943, to November 4, 1943, notice thereof being given to interested parties and by legal notice in newspapers having a circulation in Hartford, New Haven, Bridgeport, Stamford, Waterbury, and New London. At said time and place The Southern New England Company appeared by its counsel, president, and general auditor. There were no other appearances.

This citation results from the agreement effected by the Federal Communications Commission with the American Telephone and Telegraph Company (FCC Docket 6468) to increase the share of participating telephone companies in the rates and revenues of the Long Lines Department of that company.

The effect of that agreement upon The Southern New England Telephone Company was to increase the revenues to that company approximately $600,000 for the year 1943 under an amendment to the contract between The Southern New England Telephone Company and the American Telephone and Telegraph Company. The increase in revenues on an annual basis by this adjustment is expected to approximate $939,000.

The Southern New England Telephone Company presented in detail its total revenues and expenses, including all taxes, for the year 1943 and in prospect for the year 1944. It appears from this testimony that the total operating revenues of the company for the year 1943, including the adjustment with the American Telephone and Telegraph Company, referred to above, amounted to $29,539,000 or an increase of $3,476,000 compared with the year 1942. The principal source of the increase was in toll service. The company's total expenses for the year 1943, including all taxes, amounted to $26,994,000, an increase of about $3,554,000 over the year 1942. In this increase the Federal income tax, amounting to $3,899,000 for the year 1943, showed an increase of $929,000 over 1942. The increase in operating expenses was thus nearly $100,000 more than the increase in operating revenues so that the earnings per share for the year 1943 were somewhat less than for 1942, namely, $6.36 per share in 1943, compared with $6.56 per share in 1942. The net operating income for the year 1943, which is after taxes, and which is a measure of the earnings of the investors in the company, was $3,645,000 for the year 1943 comparing with $3,680,000 for the year 1942. This net operating income applied to the total telephone plant installed at the end of 1943, plus working capital, less the company's depreciation reserve, or net investment of the company, afforded a rate of return of 4.65 per cent or approximately the same as for the year 1942. The rate of return so indicated appears to have been declining slowly since 1928 in which year it was 7.99 per cent.

Operating revenues for the year

1944 are estimated at $29,961,000, or an increase of about $422,000 over revenues for 1943. The total operating expenses for the year 1944 are estimated at $27,623,000, or an increase of $629,000 over 1943. This increase is due largely to an increase in wages paid employees. The estimate for Federal income taxes for the year 1944 is $3,139,000. The earnings are thus expected to decline to $95.85 per share for 1944 and the return on the net investment is expected to decline to 4.4 per cent.

If the revenues of the company for the year 1943 had been reduced on an annual basis $939,000, representing the elimination of the adjustment effected with the American Telephone and Telegraph Company as a result of the Federal Communications Commission's proceeding, the rate of return on the net investment plus working capital would have been reduced from 4.65 per cent to 4.42 per cent. The prospective rate of return for the year 1944 with this elimination would be reduced from 4.4 per cent to 4.17 per cent. Similarly, the earnings of $6.36 per share of common stock for the year 1943 would have been reduced to $5.91 per share and the prospective earnings per share for the year 1944 would be reduced from $5.85 per share to $5.40 per share. The relatively slight reduction in rate of return for these two years is due to the operation of the normal Federal income tax rate of 40 per cent and the 90 per cent excess profits tax. The company was subject to the excess profits tax in 1943 and will be subject to the excess profits tax for the year 1944 on the company's present forecast of earnings.

While telephone companies in about fourteen other states and the District of Columbia have reduced certain intrastate rates as an aftermath of the agreement between the Federal Communications Commission and the American Telephone and Telegraph Company, The Southern New England Telephone Company has heretofore made most of these adjustments. In about 1941 it reduced its person-to-person overtime charge to the level of the station-to-station overtime charge, which effected a reduction in revenues on an annual basis of about $47,500. In 1941 the company eliminated a report charge on toll calls which amounted to a reduction in revenues of about $23,500 on an annual basis. While the company has made no further reduction in intrastate toll rates, as a result of the Federal Communications Commission's proceeding, the initial period rates for intrastate toll calls now in force under the tariffs of The Southern New England Telephone Company compare favorably with the initial period rates of those companies which have made reductions as a result of that proceeding. If the company were to modify its intrastate toll rates to conform with its toll rates in interstate commerce, revenues of the company would be increased an estimated amount of about $350,000 annually. This increase would arise from the fact that the company has in force between stations in Connecticut 5-cent toll rates for calls within a 6-mile area, which rates would be increased, in conforming them with the interstate rates for the same distance, in an amount more than offsetting any reduction effected in intrastate toll rates of greater distance.

While private line telephone and

telegraph rates have been reduced by some companies as a result of the Federal Communications Commission's proceeding, it is claimed by the company that its rates for this type of service are low now in relation to toll telephone rates and that a reduction now might result in a greater demand for service which cannot be supplied under wartime conditions. The company has not reduced the message toll overtime of calls above 30 cents from one-third to one-fourth of the basic charge as has been done by other companies. The amount of revenue involved here approximates $28,000 on an annual basis. In order to place the message toll overtime rates between exchanges in Connecticut on a parity with message toll overtime rates between exchanges in interstate commerce, the company is directed to reduce its message toll overtime rates between exchanges in Connecticut for calls above 30 cents from one-third to one-fourth of the basic toll charge.

In view of the net operating income of the company for the year 1943 and the indicated rate of return of the company upon its net investment for the same year in property devoted to public service, and in view of the prospective earnings and net operating income of the company for the year 1944, set forth above, the Commission does not believe that it should order the company to decrease its intrastate toll rates by making a refund of the increased share in toll revenues which it has received and is receiving following the revision of its contract with the American Telephone and Telegraph Company. The obligation upon the company to provide adequate service to its customers and the difficulties of doing so under wartime conditions, with which the Commission is concerned under its regulatory powers, do not warrant an order requiring a refund.

The citation in this matter is, therefore, terminated. However, in order that the Commission and the company may have some basis for determining the reasonableness of rates charged customers as users of exchange service and as users of toll service, the company is directed to begin and complete, as soon as the availability of manpower under the National Emergency permits, a study of its investment, revenues and expenses as related to its intrastate business between service supplied its customers on an exchange basis and on a toll basis. In the interim, The Southern New England Telephone Company is directed to report to the Commission on or about January 1, 1945, and annually thereafter, the progress which may have been made in the preparation of this separation study.

We hereby direct that notice of the foregoing be given by the secretary of this Commission by forwarding true and correct copies thereof to parties in interest, and due return make.

DISTRICT OF COLUMBIA PUBLIC UTILITIES COMMISSION

Re Unclaimed Customers' Deposits to Guarantee Payment of Bills

P.U.C. No. 3014, Order No. 2752
March 21, 1944

INVESTIGATION *of practice of transferring unclaimed customers' deposits to earned surplus; practice disapproved and accounting requirements prescribed.*

Accounting, § 19 — Unclaimed customers' deposits.

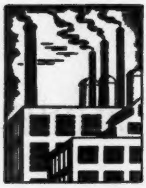
Unclaimed balances of customers' deposits to guarantee payment of bills, including interest thereon, should not be transferred to earned surplus but should be accounted for in such a manner that the amounts accrued for losses resulting from uncollectible accounts will be reduced by the amount of such unclaimed deposits.

By the COMMISSION: It has been the practice of the three utilities in the District of Columbia, namely, the Potomac Electric Power Company, the Washington Gas Light Company and The Chesapeake and Potomac Telephone Company, which by reason of the nature of the service rendered require deposits to guarantee payment of bills, to periodically transfer any unclaimed deposits to surplus. This has been done by The Chesapeake and Potomac Telephone Company in accordance with the provisions of the Uniform System of Accounts for Telephone Companies, and with the knowledge and consent of the Commission in the case of the other two companies. The propriety of this practice has been considered by the Commission and, in view of the fact that the purpose of permitting utilities to require deposits of this nature is to reduce losses from uncollectible bills to the end that other customers would not be penalized, the Commission is of the opinion that unclaimed customers' deposits should also be used for this same purpose. The transfer of these items to earned surplus does not accomplish this result.

Therefore it is *ordered:*

Section 1. That any unclaimed balances of customers' deposits to guarantee payment of bills, including interest thereon, applicable to accounts for electric, gas or telephone service terminated on or after January 1, 1944, shall be accounted for by the Potomac Electric Power Company, the Washington Gas Light Company and The Chesapeake and Potomac Telephone Company in such a manner that the amounts accrued for losses resulting from uncollectible accounts will, on and after January 1, 1944, be reduced by the amount of such unclaimed deposits.

Section 2. That the unclaimed deposits specified in § 1 hereof may be retained in an appropriate subaccount of the balance sheet account "Customers' Deposits" for a period not to exceed three years from the date of rendition of a final bill for electric, gas or telephone service.



Industrial Progress

Selected information about products, supplies and services offered by manufacturers. Also announcements of new literature and changes in personnel.

International Still Producing Commercial Trucks

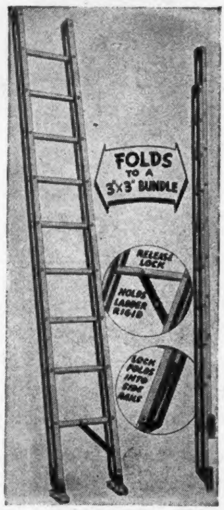
INTERNATIONAL Harvester reports continued production of the commercial trucks the company was authorized under governmental order to build in 1944. While manufacture of the heavy-duty Model KR-11 began about January 1st, the company has just recently started producing units in the medium and light-heavy classes.

"We are now producing in limited quantities the popular medium-duty Model K-5, and the heavy-duty Models K-7 and KR-11," stated P. V. Moulder, general manager of the motor truck division. "These trucks have gross vehicle weight ratings of 13,500, 16,500 and 27,000 pounds respectively. All three models are available with 2-speed rear axles if desired.

"Several improvements, including more powerful Blue Diamond and Red Diamond engines in Models K-7 and KR-11, respectively, are embodied in these new trucks. The K-7 is equipped with hydraulic brakes with the newly developed hydrovac vacuum-power system while the larger model has air-brakes."

Folding Ladder Announced

THE Duo-Safety Ladder Corporation of Oshkosh, Wisconsin, announces the manufacture of the new "Series G" heavy-duty, lightweight folding ladder. This new



type "G" folding ladder is easy to handle, according to the manufacturer, because of its light weight and compact banking—it folds into a bundle 3 in. by 3 in. A special lock keeps the ladder absolutely rigid in the open position and its Duo-Safety safety shoes provide maximum safety while working on all types of surfaces.

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Young and Swope Elected by G-E for Twenty-first Time

For the twenty-first time, Owen D. Young and Gerard Swope were elected chairman of the board and president, respectively, of the General Electric Company by the directors of the company at a recent meeting.

Since Mr. Young and Mr. Swope first assumed these offices in May, 1922, General Electric has grown from a company with orders of $179,000,000 a year to one with orders, for 1943, of $1,360,000,000. Its net sales billed have increased from $221,000,000 to $1,357,000,000 during the same period. The number of stockholders has increased from 29,044 to 230,910, and the number of employees from 71,000 to 175,290.

Kotal Appointments

The Kotal Company announces the appointment of The Lofland Company, Dallas, Texas, as distributor of Kotal in the state of Texas. While A. V. Polak, of Atlanta, Georgia, has been appointed sales agent in the states of South Carolina, Georgia, Florida, and Alabama for the company.

The Kotal Company is the producer of all-weather bituminous paving mixes of "greatly increased toughness and durability."

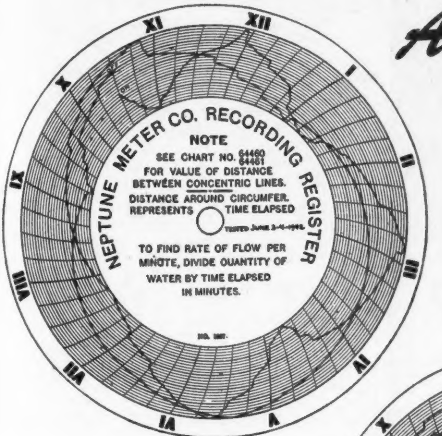
New Cochrane Boiler Meter

Cochrane Corporation of Philadelphia, manufacturers of flow measuring instruments, steam power plant equipment, and specialties, announces a new boiler meter of the steam-flow, air-flow type, known as the Cochrane Boiler Ratio Meter. Several important advantages are claimed over other constructions on the market. The operator can establish the relation of air supply to fuel supply (measured by steam generated) most favorable to his particular operation by means of an easily adjustable cam in the air flow mechanism.

Quick and easy reading is provided, the manufacturer claims, by a red indicating pointer operating across a white 10 in. scale, making it unnecessary to examine closely the position of the pens to determine whether the air is excessive or insufficient as the movement of the pointer is 3 times as great as the

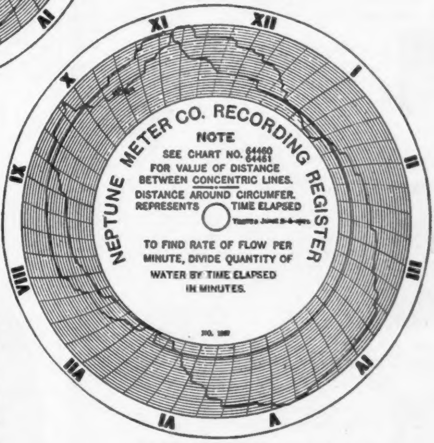
Demonstrating the Value of

A Sensitive Accurate Meter....



CONSUMPTION 55.1 CU. FT.

Chart at left is an actual record taken from a house with a toilet leak of about 1/10th gallon per minute, as registered by a sensitive, accurate meter.



CONSUMPTION 35.5 CU. FT.

Chart at right shows the result in the same house after this leak had been repaired—a drop in consumption, for a 24-hour period, of 149 gallons.

THIS comparison clearly demonstrates the value of a sensitive, accurate meter, as a meter which would not register at this low rate of flow would never have picked up the leak.

The Water Company would have lost the revenue on approximately 149 gallons per day or about 13,500 gallons per quarter.

Instead of 1/10th gallon per minute, leakage might have run as high as 1/3rd gallon per minute, with that much more loss to the Water Company.

NEPTUNE METER COMPANY
50 West 50th Street
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Branch Offices in CHICAGO, SAN FRANCISCO, LOS ANGELES, PORTLAND, ORE., DENVER, DALLAS, KANSAS CITY, LOUISVILLE, ATLANTA, BOSTON

Neptune Meters, Ltd., Long Branch, Ont., Canada

differences between the pens. A new bulletin, "Double-Barreled Combustion Guidance," describing the meter, is available from the manufacturer.

Now Commercial Controls Corp.

At a special meeting stockholders of the National Postal Meter Company, Inc., unanimously voted to change the corporate name to Commercial Controls Corporation.

The company manufactures what has been known as the NPM line of metered mail machines, postal and parcel post scales, letter openers and sealers, multipost stamp affixers, and ticketograph production control systems. The change of name was decided upon, according to Charles R. Ogsbury, president, because it is more descriptive of the broadened field of operations upon which the organization is entering.

General offices and plants of the corporation are located in Rochester, New York, with branches and agencies in principal cities.

Dresser Elects New Officers

H. N. Mallon, president of the Dresser Manufacturing Company, has announced election of three vice presidents of the company following a recent meeting of the board of directors.

J. B. O'Connor has been elected executive vice president. Arthur R. Weis and Lyle C. Harvey have been elected vice presidents.

It's Good Business

AT ANY TIME TO GET THE MOST OUT OF YOUR METERS

Common sense dictates good meter care. Now especially, it is imperative to make old equipment last for the duration. Today's operations call for increasing vigilance on the part of those in charge of measurement. Inspect and test regularly, service carefully, and thus forestall as much as possible the need for new meters.

EMCO Meters are easy to keep operating at top accuracy. They can be renewed and modernized through the installation of interchangeable parts that incorporate, wherever possible, the latest advances in construction.

The durable quality of EMCO Meters is now proving its worth on important war-time assignments. Given proper care they can be depended upon to provide high measurement standards even after serving their normal life span.

• REQUIRED READING •

Put new life into your present EMCO Meters. This 80 page Repair and Maintenance Manual, profusely illustrated, tells by word, picture and diagram the approved factory methods for reconditioning EMCO and Ironclad displacement meters. Jigs and tools described therein can be secured that will assure an accurately fitted, free running repair job even with inexperienced labor. Your meters can be kept in top condition for the duration through the proper installation of modernized EMCO repair parts. Write for your free copy of this manual today.

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MERCO NORDSTROM VALVE CO.
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Atlanta Brooklyn Chicago New York Columbia Houston Kansas City Pittsburgh San Francisco Seattle Boston Buffalo Los Angeles Tulsa
National Meter Division, Brooklyn, N. Y.

Styles *have* changed since 1909, the year the first ACSR was made

Electric range, vintage of 1909

Line styles have changed, but the ACSR on this modern line follows the original formula; steel for strength, aluminum for conductivity and long life.

The first Aluminum Cable Steel Reinforced was fabricated in 1909 by Aluminum Company of America. Its size was No. 2 (No. 4 copper equivalent); a conductor now widely used in rural electrification. Six aluminum wires are stranded around one steel wire, to give a combination of high electrical conductivity, durability and high strength.

Line styles have changed considerably since then. Structures, insulators and fittings have all put on new faces. Spans have been greatly lengthened to reduce construction costs, permitting extension of service into low income areas. The advantages which gave the ACSR of 1909 acceptance by line builders have made it equally popular for these modern rural lines.

Thousands of miles of ACSR have been purchased for the construction and extension of rural lines. Builders have had the counsel of Alcoa's engineers and supervisors, receiving recommendations based on experience gained during these many years, 1909 to 1944.

This service is available to help you keep war-loaded lines on the job, or extend them into new areas. ALUMINUM COMPANY OF AMERICA, 2134 Gulf Building, Pittsburgh 19, Pennsylvania.

ALCOA A·C·S·R

ALUMINUM CABLE STEEL REINFORCED

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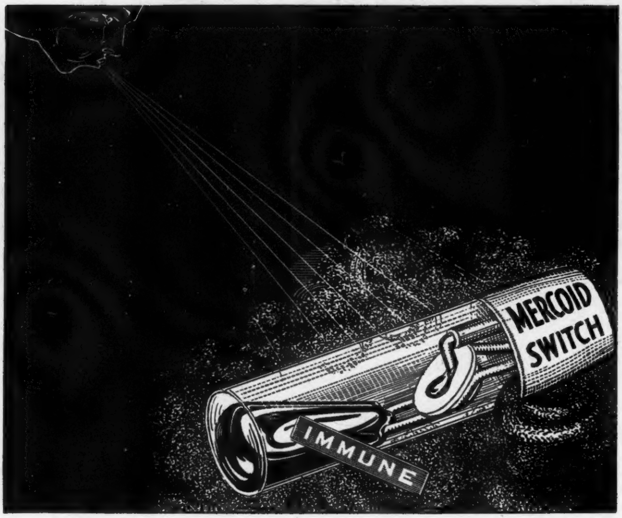

DUST—UNDER CONTROL

Dust is a natural nuisance, ever present throughout a changing universe where forces of disintegration and destruction somehow intermingle with constructive processes, striking a balance to perpetuate our world in spite of the: "—to dust returneth" pronouncement on all animate and inanimate things.

If it were possible to make a complete analysis of every minute particle in a handful of city dust, we would likely find traces of all the elements in varying proportions, and no small number of disease bearing bacteria, including many corrosive substances. If it were also possible to trace the source of each particle, it would present a series of pictures to challenge the imagination.

Whatever else may be said of dust, in this instance we are concerned with its effect upon electrical contacting surfaces. When dust is present, the efficiency of the contacts is impaired and the life of their usefulness is shortened. Where the dust is eliminated as in the case of a Mercoid hermetically sealed mercury switch, the contacting surfaces are always constant in their efficiency and the life of the switch is prolonged indefinitely.

Mercoid Controls have an advantage, because they are equipped exclusively with Mercoid DUST-PROOF switches —hence the assurance of better control performance, longer control life and greater economy in control value, regardless of costs.

THE MERCOID CORPORATION • 4213 BELMONT AVE. • CHICAGO, ILL.

PROFESSIONAL DIRECTORY

• This Directory is reserved for engineers, accountants, rate experts, consultants, and others equipped to serve utilities in all matters relating to rate questions, appraisals, valuations, special reports, investigations, design, and construction. ‹ ‹ ‹

(Professional Directory Continued on Next Page)

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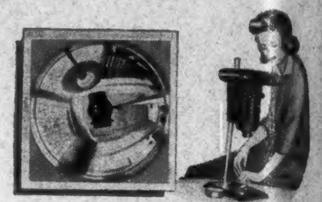
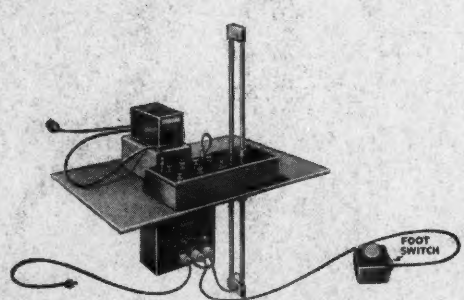
Electrical Ideas in Action!

HELPING TO MEET AMERICA'S WARTIME NEEDS

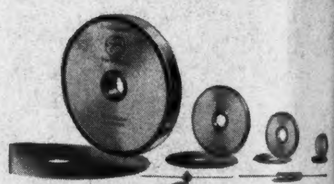
FOR ELECTRICAL ENGINEERS serving industry, these new electrical ideas serve a double purpose. ● First, by direct application, they may help to save energy, man power, or critical materials. ● Second, they may bring to mind problems which might be solved by similar electrical pioneering. If you know of such a problem, why not ask G.E. for assistance? Engineering aid is available on any job that can help win the war. *General Electric Company, Schenectady, N. Y.*



CORRECT ILLUMINATION in a war plant can now be determined more quickly with a new "fish-eye" camera developed in the G-E Research Laboratory. This "illuminagraphic camera" employs a convex reflecting mirror that picks up side lighting as well as overhead lighting in exact proportion to its illuminating effect at any particular point on the working plane. Thus illumination from extended light sources, such as windows or banks of fluorescent lamps, can be analyzed without elaborate calculations.



FAST AND PRECISE MEASUREMENT of the number of turns in a coil is made by a new coil-turn counter announced recently by General Electric. Operation of the counter is simplified by a galvanometer control panel with built-in reference coils. A magnetizing-current control box permits operation directly from a 120-volt d-c supply or a 20-volt storage battery. Accuracy of the counter is one turn in 1000 for coils of common sizes. In production work, 80 to 100 coils per hour can be checked.



ELECTRONIC-CIRCUIT PROBLEMS that require a resistance material in which a relatively small increase in voltage results in a large increase in current can be successfully solved by using General Electric Thyrite. This material can be molded to form varistors of the required physical size and electrical specifications. Thyrite has had important uses for many years; for example, as the "valve" element in lightning arresters. Now design engineers in the electronic and communications fields are finding many new uses for it. Our local office can tell you what information is needed for quotations.

GENERAL ELECTRIC

301-27E-170

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